# **CHAPTER 9**

## LONG-LIVED ASSETS

## **CHAPTER STUDY OBJECTIVES**

- 1. Calculate the cost of property, plant, and equipment. The cost of property, plant, and equipment includes all costs that are necessary to acquire the asset and make it ready for its intended use. All costs that benefit future periods (that is, capital expenditures) are included in the cost of the asset. When applicable, cost also includes asset retirement costs. When multiple assets are purchased in one transaction, or when an asset has significant components, the cost is allocated to each individual asset or component using their relative fair values.
- 2. Apply depreciation methods to property, plant, and equipment. After acquisition, assets are accounted for using the cost model or the revaluation model. Depreciation is recorded and assets are carried at cost less accumulated depreciation. Depreciation is the allocation of the cost of a long-lived asset to expense over its useful life (its service life) in a rational and systematic way. Depreciation is not a process of valuation and it does not result in an accumulation of cash. There are three commonly used depreciation methods:

	Effect on Annual	
<u>Method</u>	<u>Depreciation</u>	<u>Calculation</u>
Straight-line	Constant amount	(Cost — residual value) ÷ estimated useful life (in years)
Diminishing- balance	Diminishing amount	Carrying amount at beginning of year × diminishing-balance rate
Units-of- production	Varying amount	(Cost – residual value) ÷ total estimated units-of-production × actual activity during the year

Each method results in the same amount of depreciation over the asset's useful life. Depreciation expense for income tax purposes is called capital cost allowance (CCA).

3. Explain the factors that cause changes in periodic depreciation and calculate revised depreciation for property, plant, and equipment. A revision to depreciation will be required if there are (a) capital expenditures during the asset's useful life; (b) impairments in the asset's fair value; (c) changes in the asset's fair value when using the revaluation model; and/or (d) changes in the appropriate depreciation method, estimated useful life, or residual value. An impairment loss must be recorded if the recoverable amount is less than the carrying amount. Revisions of periodic depreciation are made in present and future periods, not retroactively. The new annual depreciation is determined

by using the depreciable amount (carrying amount less the revised residual value), and the remaining useful life, at the time of the revision.

- 4. *Demonstrate how to account for property, plant, and equipment disposals.* The accounting for the disposal of a piece of property, plant, or equipment through retirement or sale is as follows:
- (a) Update any unrecorded depreciation for partial periods since depreciation was last recorded.
- (b) Calculate the carrying amount (cost accumulated depreciation).
- (c) Calculate any gain (proceeds > carrying amount) or loss (proceeds < carrying amount) on disposal.
- (d) Remove the asset and accumulated depreciation accounts at the date of disposal. Record the proceeds received and the gain or loss, if any.

An exchange of assets is recorded as the purchase of a new asset and the sale of an old asset. The new asset is recorded at the fair value of the asset given up plus any cash paid (or less any cash received). The fair value of the asset given up is compared with its carrying amount to calculate the gain or loss. If the fair value of the new asset or the asset given up cannot be determined, the new long-lived asset is recorded at the carrying amount of the old asset that was given up, plus any cash paid (or less any cash received).

- 5. Record natural resource transactions and calculate depletion. The units-of-production method of depreciation is generally used for natural resources. The depreciable amount per unit is calculated by dividing the total depreciable amount by the number of units estimated to be in the resource. The depreciable amount per unit is multiplied by the number of units that have been extracted to determine the annual depletion. The depletion and any other costs to extract the resource are recorded as inventory until the resource is sold. At that time, the costs are transferred to cost of resource sold on the income statement. Revisions to depletion will be required for capital expenditures during the asset's useful life, for impairments, and for changes in the total estimated units of the resource.
- 6. *Identify the basic accounting issues for intangible assets and goodwill.* The accounting for tangible and intangible assets is much the same. Intangible assets are reported at cost, which includes all expenditures necessary to prepare the asset for its intended use. An intangible asset with a finite life is amortized over the shorter of its useful life and legal life, usually on a straight-line basis. The extent of the annual impairment tests depends on whether IFRS or ASPE is followed and whether the intangible asset had a finite or indefinite life. Intangible assets with indefinite lives and goodwill are not amortized and are tested at least annually for impairment. Impairment losses on goodwill are never reversed under both IFRS and ASPE.
- 7. *Illustrate the reporting and analysis of long-lived assets.* It is common for property, plant, and equipment, and natural resources to be combined in financial statements under the heading "property, plant, and equipment." Intangible assets with finite and indefinite lives are sometimes combined under the heading "intangible assets" or are listed separately. Goodwill must be presented separately. Either on the balance sheet or in the notes, the cost of the major classes of long-lived assets is presented. Accumulated depreciation (if the asset is depreciable) and carrying amount must be disclosed either on the balance sheet or in the notes. The depreciation and amortization methods and rates, as well as the annual depreciation expense, must also be indicated. The company's impairment policy and any impairment losses should be described and reported.

Under IFRS, companies must include a reconciliation of the carrying amount at the beginning and end of the period for each class of long-lived assets and state whether the cost or revaluation model is used.

The asset turnover ratio (net sales  $\div$  average total assets) is one measure that is used by companies to show how efficiently they are using their assets to generate sales revenue. A second ratio, return on assets (profit  $\div$  average total assets), calculates how profitable the company is in terms of using its assets to generate profit.

### TRUE-FALSE STATEMENTS

1. All long-lived assets must be depreciated for accounting purposes.

Answer: False

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA:** Financial Reporting

AACSB: Analytic

2. All long-lived assets that are included in property, plant, and equipment must be used in the operations of the business.

Answer: True

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA**: Financial Reporting

AACSB: Analytic

3. If long-lived assets are intended for sale, they are included in property, plant, and equipment.

Answer: False

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA:** Financial Reporting

AACSB: Analytic

4. If an item of property, plant, and equipment is recognized as an asset, it is probable that the company will NOT receive economic benefits from the item.

Answer: False

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA:** Financial Reporting

AACSB: Analytic

5. Any non-refundable taxes incurred on the acquisition of an asset would be expensed at the time of acquisition.

Answer: False

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA:** Financial Reporting

AACSB: Analytic

6. The expenditures necessary to bring the asset to the location and condition necessary to make it ready for its intended use would be included in the cost of the asset.

Answer: True

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA**: Financial Reporting

AACSB: Analytic

7. Costs that benefit future periods are included in a long-lived asset account, and are called operating expenses.

Answer: False

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA**: Financial Reporting

AACSB: Analytic

8. If insurance is incurred transporting the asset to its final position, this insurance will be added to the cost of the asset.

Answer: True

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA:** Financial Reporting

AACSB: Analytic

9. Subsequent to the acquisition of an asset, insurance costs would be added to the cost of the asset.

Answer: False

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA:** Financial Reporting

AACSB: Analytic

10. If paid by the purchaser, freight charges and insurance during transit are included in the cost of equipment.

Answer: True

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA:** Financial Reporting

AACSB: Analytic

11. An architect's fee for the plans for a new building would be included in the cost of the land improvements.

Answer: False

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA**: Financial Reporting

AACSB: Analytic

12. A basket purchase of long-lived assets requires that the fair values be assigned based on the cost of each asset.

Answer: False

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA:** Financial Reporting

AACSB: Analytic

13. The cost of land improvements is NOT depreciated because land improvements typically do NOT decline in value.

Answer: False

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA:** Financial Reporting

AACSB: Analytic

14. Under IFRS, companies have two models they can choose between to account for their property, plant, and equipment: the cost model or the revaluation model.

Answer: True

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA:** Financial Reporting

AACSB: Analytic

15. Most Canadian companies reporting under IFRS do NOT use the revaluation method when accounting for their long-lived assets.

Answer: True

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA**: Financial Reporting

AACSB: Analytic

16. Land improvements decline in service potential with time.

Answer: True

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA:** Financial Reporting

AACSB: Analytic

17. Depreciation is the systematic allocation of the cost of a long-lived asset, such as property, plant, and equipment, over the asset's physical life.

Answer: True

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA:** Financial Reporting

AACSB: Analytic

18. An asset's cost is allocated to expense over the asset's useful life because the asset is used to help generate revenue over that period of time.

Answer: True

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA:** Financial Reporting

AACSB: Analytic

19. Assets are depreciated over their useful lives even if the use of the asset is NOT directly related to earning profit.

Answer: True

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA**: Financial Reporting

AACSB: Analytic

20. Depreciation is a process of cost allocation.

Answer: True

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA: Financial Reporting** 

AACSB: Analytic

21. Residual value is NOT depreciated since the amount is expected to be recovered at the end of the asset's useful life.

Answer: True

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA:** Financial Reporting

AACSB: Analytic

22. Recording depreciation on long-lived assets affects the balance sheet and the income statement.

Answer: True

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA:** Financial Reporting

AACSB: Analytic

23. The units-of-production method of depreciation will result in the highest cash flow for the company.

Answer: False

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA:** Financial Reporting

AACSB: Analytic

24. Subject to acquisition, all costs that relate to that asset are classified as operating expenses.

Answer: False

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA: Financial Reporting** 

AACSB: Analytic

25. The Accumulated Depreciation account represents a cash fund available to replace long-lived assets.

Answer: False

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

CPA: Financial Reporting

AACSB: Analytic

26. In calculating depreciation, both the long-lived asset's cost and useful life are based on estimates.

Answer: False

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA:** Financial Reporting

AACSB: Analytic

27. Under the double diminishing-balance method, the depreciation rate used each year remains constant.

Answer: True

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA**: Financial Reporting

AACSB: Analytic

28. Using the units-of-production method of depreciating factory equipment will generally result in more depreciation expense being recorded over the life of the asset than if the straight-line method

had been used.

Answer: False

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

CPA: Financial Reporting

AACSB: Analytic

29. Straight-line depreciation will result in a higher profit than the double diminishing-balance method in the early years of an asset's life.

Answer: True

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA**: Financial Reporting

AACSB: Analytic

30. The Canada Revenue Agency does NOT require the taxpayer to use the same depreciation method on the tax return that is used in preparing financial statements.

Answer: True

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA**: Financial Reporting

AACSB: Analytic

31. A company using the diminishing-balance method of depreciation will have higher profit in the early years of the asset.

Answer: False

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA**: Financial Reporting

32. The amount of an asset's residual value does NOT affect the calculation of depreciation in the units-of-production method.

Answer: False

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA:** Financial Reporting

AACSB: Analytic

33. In the straight-line method, the higher the residual value the greater the profit.

Answer: True

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA:** Financial Reporting

AACSB: Analytic

34. The diminishing-balance method will yield a higher cost of goods sold.

Answer: False

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA**: Financial Reporting

AACSB: Analytic

35. In the diminishing-balance method, the rate of depreciation decreases each year.

Answer: False

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA**: Financial Reporting

36. In the diminishing-balance method, the depreciation expense on an asset will decrease each year.

Answer: True

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA:** Financial Reporting

AACSB: Analytic

37. In the straight-line method of depreciation, the rate of depreciation remains constant over time.

Answer: True

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA**: Financial Reporting

AACSB: Analytic

38. Once an asset is fully depreciated, no additional depreciation can be taken even though the asset is still being used by the business.

Answer: True

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA**: Financial Reporting

AACSB: Analytic

39. The units-of-production method is ideal for equipment whose production can be measured in units of output.

Answer: True

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

CPA: Financial Reporting

40. CRA does NOT allow taxpayers to estimate the useful lives of assets or depreciation rates.

Answer: True

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA:** Financial Reporting

AACSB: Analytic

41. Under CRA, depreciation expense is NOT optional in calculating profit.

Answer: True

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA:** Financial Reporting

AACSB: Analytic

42. The carrying amount of a long-lived asset is the amount originally paid for the asset less anticipated residual value.

Answer: False

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA**: Financial Reporting

AACSB: Analytic

43. Ordinary repairs are costs to maintain the asset's operating efficiency and expected productive life.

Answer: True

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Explain the factors that cause changes in periodic depreciation and calculate

revised depreciation for property, plant, and equipment.

Section Reference: Revising Periodic Depreciation

**CPA**: Financial Reporting

44. A change in the estimated residual value of a long-lived asset requires a restatement of prior years' depreciation.

Answer: False

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Explain the factors that cause changes in periodic depreciation and calculate

revised depreciation for property, plant, and equipment. Section Reference: Revising Periodic Depreciation

**CPA**: Financial Reporting

AACSB: Analytic

45. Additions and improvements to a long-lived asset that increase the asset's operating efficiency, productive capacity, or expected useful life are generally expensed in the period incurred.

Answer: False

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Explain the factors that cause changes in periodic depreciation and calculate

revised depreciation for property, plant, and equipment. Section Reference: Revising Periodic Depreciation

**CPA**: Financial Reporting

AACSB: Analytic

46. Additions and improvements are costs that are incurred to maintain the asset's operating efficiency, productive capacity, or expected useful life.

Answer: False

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Explain the factors that cause changes in periodic depreciation and calculate

revised depreciation for property, plant, and equipment. Section Reference: Revising Periodic Depreciation

**CPA**: Financial Reporting

AACSB: Analytic

47. An impairment loss is the amount by which the asset's carrying amount exceeds its recoverable amount.

Answer: True

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Explain the factors that cause changes in periodic depreciation and calculate

revised depreciation for property, plant, and equipment. Section Reference: Revising Periodic Depreciation

**CPA**: Financial Reporting

AACSB: Analytic

48. An impairment loss can only occur in long-lived assets with a finite life.

Answer: False

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Explain the factors that cause changes in periodic depreciation and calculate

revised depreciation for property, plant, and equipment. Section Reference: Revising Periodic Depreciation

**CPA**: Financial Reporting

AACSB: Analytic

49. IFRS allow the reversal of a previously recorded impairment loss.

Answer: True

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Explain the factors that cause changes in periodic depreciation and calculate

revised depreciation for property, plant, and equipment. Section Reference: Revising Periodic Depreciation

**CPA:** Financial Reporting

AACSB: Analytic

50. Under IFRS, at each year end, the company must determine whether or not an impairment loss still exists by measuring the asset's recoverable amount.

Answer: True

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Explain the factors that cause changes in periodic depreciation and calculate

revised depreciation for property, plant, and equipment.

Section Reference: Revising Periodic Depreciation

**CPA**: Financial Reporting

AACSB: Analytic

51. Under the revaluation model, the carrying amount of property, plant, and equipment is its fair value plus any subsequent accumulated depreciation less any subsequent impairment losses.

Answer: False

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Explain the factors that cause changes in periodic depreciation and calculate

revised depreciation for property, plant, and equipment. Section Reference: Revising Periodic Depreciation

CPA: Financial Reporting

AACSB: Analytic

52. A loss on disposal of a long-lived asset as a result of a sale or a retirement is calculated in the same way.

Answer: True

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Demonstrate how to account for property, plant, and equipment disposals.

Section Reference: Disposals of Property, Plant, and Equipment

**CPA:** Financial Reporting

AACSB: Analytic

53. A long-lived asset must be fully depreciated before it can be removed from the books.

Answer: False

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Demonstrate how to account for property, plant, and equipment disposals.

Section Reference: Disposals of Property, Plant, and Equipment

**CPA:** Financial Reporting

AACSB: Analytic

54. A loss on disposal of long-lived assets can only occur if the cash proceeds received from the asset sale are less than the asset's carrying amount.

Answer: True

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Demonstrate how to account for property, plant, and equipment disposals.

Section Reference: Disposals of Property, Plant, and Equipment

**CPA:** Financial Reporting

55. The first step in recording a disposal of a long-lived asset is to update that asset's depreciation.

Answer: True

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Demonstrate how to account for property, plant, and equipment disposals.

Section Reference: Disposals of Property, Plant, and Equipment

**CPA:** Financial Reporting

AACSB: Analytic

56. In a disposal of an asset, if the carrying amount of the asset exceeds the proceeds received, profit will increase.

Answer: False

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Demonstrate how to account for property, plant, and equipment disposals.

Section Reference: Disposals of Property, Plant, and Equipment

**CPA:** Financial Reporting

AACSB: Analytic

57. When an asset is retired, there are no proceeds received.

Answer: True

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Demonstrate how to account for property, plant, and equipment disposals.

Section Reference: Disposals of Property, Plant, and Equipment

**CPA:** Financial Reporting

AACSB: Analytic

58. In a retirement of an asset, if the carrying amount of the asset is greater than \$1, profit will increase.

Answer: False

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Demonstrate how to account for property, plant, and equipment disposals.

Section Reference: Disposals of Property, Plant, and Equipment

**CPA**: Financial Reporting

59. A higher trade-in value will increase the profit of the company disposing of an asset.

Answer: False

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Demonstrate how to account for property, plant, and equipment disposals.

Section Reference: Disposals of Property, Plant, and Equipment

**CPA:** Financial Reporting

AACSB: Analytic

60. The cost of natural resources is NOT allocated to expense because the natural resources are replaceable only by an act of nature.

Answer: False

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Record natural resource transactions and calculate depletion.

Section Reference: Natural Resources

**CPA:** Financial Reporting

AACSB: Analytic

61. Conceptually, the cost allocation procedure for natural resources parallels that of property, plant, and equipment.

Answer: True

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Record natural resource transactions and calculate depletion.

Section Reference: Natural Resources

**CPA**: Financial Reporting

AACSB: Analytic

62. Natural resources are often called wasting assets because it is difficult to use the assets in an efficient manner.

Answer: False

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Record natural resource transactions and calculate depletion.

Section Reference: Natural Resources

**CPA**: Financial Reporting

63. Accumulated depreciation is only recognized on natural resources that have been extracted and sold during the period.

Answer: False

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Record natural resource transactions and calculate depletion.

Section Reference: Natural Resources

**CPA:** Financial Reporting

AACSB: Analytic

64. The diminishing-balance method is the most common method of depreciation for natural resources.

Answer: False

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Record natural resource transactions and calculate depletion.

Section Reference: Natural Resources

**CPA:** Financial Reporting

AACSB: Analytic

65. Natural resources do NOT have to be tested for impairment annually.

Answer: False

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Record natural resource transactions and calculate depletion.

Section Reference: Natural Resources

**CPA**: Financial Reporting

AACSB: Analytic

66. Intangible assets have unlimited life because they have no physical substance.

Answer: False

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Identify the basic accounting issues for intangible assets and goodwill.

Section Reference: Intangible Assets and Goodwill

**CPA**: Financial Reporting

67. The diminishing-balance method of amortization is the most common method of amortization for intangibles.

Answer: False

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Identify the basic accounting issues for intangible assets and goodwill.

Section Reference: Intangible Assets and Goodwill

**CPA**: Financial Reporting

AACSB: Analytic

68. The amortizable amount of an intangible should be allocated over the shorter of the estimated useful life and legal life.

Answer: True

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Identify the basic accounting issues for intangible assets and goodwill.

Section Reference: Intangible Assets and Goodwill

**CPA:** Financial Reporting

AACSB: Analytic

69. If an intangible with an indefinite life is disposed of, there is no effect on profit.

Answer: False

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Identify the basic accounting issues for intangible assets and goodwill.

Section Reference: Intangible Assets and Goodwill

**CPA**: Financial Reporting

AACSB: Analytic

70. A franchise is a contractual arrangement under which the franchisor grants the franchisee the right to sell certain products and/or to provide specific services.

Answer: True

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Identify the basic accounting issues for intangible assets and goodwill.

Section Reference: Intangible Assets and Goodwill

**CPA**: Financial Reporting

71. Goodwill CANNOT be sold individually as it is part of the business as a whole.

Answer: True

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Identify the basic accounting issues for intangible assets and goodwill.

Section Reference: Intangible Assets and Goodwill

**CPA: Financial Reporting** 

AACSB: Analytic

#### 72. Goodwill has an indefinite life.

Answer: True

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Identify the basic accounting issues for intangible assets and goodwill.

Section Reference: Intangible Assets and Goodwill

**CPA:** Financial Reporting

AACSB: Analytic

73. Goodwill should be amortized on the lesser of useful life or 20 years.

Answer: False

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Identify the basic accounting issues for intangible assets and goodwill.

Section Reference: Intangible Assets and Goodwill

**CPA:** Financial Reporting

AACSB: Analytic

74. Impairment losses on goodwill are NEVER reversed.

Answer: True

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Identify the basic accounting issues for intangible assets and goodwill.

Section Reference: Intangible Assets and Goodwill

**CPA**: Financial Reporting

75. IFRS does allow for reversals of impairment losses on both finite-life and other indefinite-life intangible assets if their value increases in the future.

Answer: True

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Identify the basic accounting issues for intangible assets and goodwill.

Section Reference: Intangible Assets and Goodwill

**CPA**: Financial Reporting

AACSB: Analytic

76. It is NOT necessary to disclose the amount of accumulated amortization on intangible assets in the financial statements.

Answer: False

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Illustrate the reporting and analysis of long-lived assets.

Section Reference: Statement Presentation and Analysis

**CPA:** Financial Reporting

AACSB: Analytic

77. The return on assets is calculated by dividing net income by total assets.

Answer: False

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Illustrate the reporting and analysis of long-lived assets.

Section Reference: Statement Presentation and Analysis

**CPA:** Financial Reporting

AACSB: Analytic

78. The asset turnover ratio indicates how efficiently a company uses its assets to generate sales.

Answer: True

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Illustrate the reporting and analysis of long-lived assets.

Section Reference: Statement Presentation and Analysis

**CPA**: Financial Reporting

79. Companies must report goodwill separately from property, plant, and equipment, and intangible assets.

Answer: True

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Illustrate the reporting and analysis of long-lived assets.

Section Reference: Statement Presentation and Analysis

**CPA**: Financial Reporting

# **MULTIPLE CHOICE QUESTIONS**

- 80. Which of the following would NOT be considered an addition to the capital cost of an asset?
- a) HST paid on the asset
- b) insurance paid when the asset was in transit from the supplier
- c) installation fee when asset is delivered
- d) freight costs paid by the purchaser

Answer: a

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA:** Financial Reporting

AACSB: Analytic

- 81. All of the following are examples of property, plant, and equipment EXCEPT
- a) equipment.
- b) copyright.
- c) land.
- d) building.

Answer: b

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA:** Financial Reporting

AACSB: Analytic

- 82. An example of operating costs of a long-lived asset would NOT include the following:
- a) insurance costs paid after the asset is being used in operations.
- b) maintenance costs.
- c) repair costs.
- d) insurance costs paid before the asset is being used in operations.

Answer: d

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA**: Financial Reporting

- 83. A company purchased land for \$70,000 cash. A total of \$7,000 was spent demolishing an old building on the land before construction of a new building could start. The cost of land would be recorded at
- a) \$77,000.
- b) \$70,000.
- c) \$63,000.
- d) \$7,000.

Answer: a

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA:** Financial Reporting

AACSB: Analytic

- 84. Which one of the following items is NOT considered a part of the cost of a truck purchased for business use?
- a) insurance during transit
- b) truck licence
- c) freight charges
- d) cost of lettering on side of truck

Answer: b

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA**: Financial Reporting

AACSB: Analytic

- 85. Which of the following assets does NOT decline in service potential over the course of its useful life?
- a) equipment
- b) furnishings
- c) land
- d) fixtures

Answer: c

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA:** Financial Reporting

AACSB: Analytic

86. The four subdivisions for property, plant, and equipment are normally

- a) land, land improvements, buildings, and equipment.
- b) intangibles, land, buildings, and equipment.
- c) furnishings and fixtures, land, buildings, and equipment.
- d) property, plant, equipment, and land.

Answer: a

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA:** Financial Reporting

AACSB: Analytic

- 87. The cost of land does NOT include
- a) costs to clear the land.
- b) annual property taxes.
- c) accrued property taxes assumed by the purchaser.
- d) legal fees.

Answer: b

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA:** Financial Reporting

AACSB: Analytic

- 88. Merry Clinic purchases land for \$80,000 cash. The clinic assumes \$2,000 in property taxes due on the land. The legal fees totalled \$1,000. The clinic has the land graded for \$2,200. What amount does Merry Clinic record as the cost for the land?
- a) \$82,000
- b) \$80,000
- c) \$85,200
- d) \$84,200

Answer: c

Bloomcode: Application Difficulty: Medium

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA**: Financial Reporting

AACSB: Analytic

89. Juang Company acquires land for \$56,000 cash. Additional costs are as follows:

Juang will record the acquisition cost of the land as

- a) \$56,000.
- b) \$56,690.
- c) \$69,990.
- d) \$59,990.

Answer: d

Bloomcode: Application Difficulty: Medium

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA:** Financial Reporting

AACSB: Analytic

- 90. Newman Hospital installs a new parking lot. The paving cost \$30,000 and the lights to illuminate the new parking area cost \$12,000. Which of the following statements is true with respect to these additions?
- a) \$30,000 should be debited to Land.
- b) \$12,000 should be debited to Land Improvements.
- c) \$42,000 should be debited to Land.
- d) \$42,000 should be debited to Land Improvements.

Answer: d

Bloomcode: Application Difficulty: Medium

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA**: Financial Reporting

- 91. General Paint Company is building a new plant that will take three years to construct. The construction will be financed in part by funds borrowed during the construction period. There are significant architect fees, excavation fees, and building permit fees. Which of the following statements is true?
- a) Excavation fees are capitalized but building permit fees are not.
- b) Architect fees are capitalized but building permit fees are not.
- c) Interest during the construction is capitalized as part of the cost of the building.

d) The capitalized cost is equal to the contract price to build the plant less any interest on borrowed funds.

Answer: c

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA:** Financial Reporting

AACSB: Analytic

- 92. A company purchases a remote site building for computer operations. The building will be suitable for operations after some expenditures. The wiring must be replaced to computer specifications. The roof is leaky and must be replaced. All rooms must be repainted and re-carpeted and there will also be some plumbing work done. Which of the following statements is true?
- a) The cost of the building will not include the repainting and re-carpeting costs.
- b) The cost of the building will include the cost of replacing the roof.
- c) The cost of the building is the purchase price of the building, while the additional expenditures are all capitalized as building improvements.
- d) The wiring is part of the computer costs, not the building cost.

Answer: b

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA:** Financial Reporting

AACSB: Analytic

- 93. Fizzard Company purchases a new delivery truck for \$45,000. The logo of the company is painted on the side of the truck for \$600. The truck licence is \$60. The truck undergoes safety testing for \$110. What does Fizzard record as the cost of the new truck?
- a) \$45,770
- b) \$45,060
- c) \$45,000
- d) \$45,710

Answer: d

Bloomcode: Application Difficulty: Medium

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA**: Financial Reporting

- 94. Interest may be included in the acquisition cost of property, plant, and equipment
- a) during the construction period of a self-constructed asset.
- b) if the asset is purchased on credit.
- c) if the asset acquisition is financed by a long-term note payable.
- d) if it is a part of a lump-sum purchase.

Answer: a

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA:** Financial Reporting

AACSB: Analytic

- 95. Expenditures that maintain the operating efficiency and expected productive life of a long-lived asset are generally
- a) expensed when incurred.
- b) capitalized as a part of the cost of the asset.
- c) debited to the Accumulated Depreciation account.
- d) not recorded until they become material in amount.

Answer: a

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA**: Financial Reporting

AACSB: Analytic

- 96. Which of the following is NOT true of ordinary repairs?
- a) They primarily benefit the current accounting period.
- b) They can be referred to as operating expenditures.
- c) They maintain the expected productive life of the asset.
- d) They increase the productive capacity of the asset.

Answer: d

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA:** Financial Reporting

- 97. The replacement of the bumper of a company's delivery truck would be classified as a(n)
- a) non-monetary exchange.
- b) addition.
- c) renovation.
- d) ordinary repair.

Answer: d

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA**: Financial Reporting

AACSB: Analytic

### 98. Additions and improvements

- a) occur frequently during the ownership of a long-lived asset.
- b) normally involve immaterial expenditures.
- c) increase the carrying amount of long-lived assets when incurred.
- d) typically only benefit the current accounting period.

Answer: c

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA**: Financial Reporting

AACSB: Analytic

- 99. A company purchased property for \$300,000. The property included an acre of land valued at \$50,000, a building valued at \$150,000, and equipment valued at \$125,000. The land will be recorded at a cost of
- a) \$45.000.
- b) \$48,234.
- c) \$46,154.
- d) \$50,000.

Answer: c

Bloomcode: Application Difficulty: Medium

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA**: Financial Reporting

100. A company purchased property for \$300,000. The property included an acre of land valued at \$50,000, a building valued at \$150,000, and equipment valued at \$125,000. The building will be recorded at a cost of

- a) \$150,000.
- b) \$140,000.
- c) \$135,000.
- d) \$138,462.

Answer: d

Bloomcode: Application Difficulty: Medium

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA: Financial Reporting** 

AACSB: Analytic

101. A company purchased property for \$300,000. The property included an acre of land valued at \$50,000, a building valued at \$150,000, and equipment valued at \$125,000. The equipment will be recorded at a cost of

- a) \$125,000.
- b) \$120,000.
- c) \$118,723.
- d) \$115,384.

Answer: d

Bloomcode: Application Difficulty: Medium

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA:** Financial Reporting

AACSB: Analytic

- 102. A company purchased property for \$300,000. The property included an acre of land valued at \$50,000, a building valued at \$150,000, and equipment valued at \$125,000. The above transaction may be referred to as a
- a) fair value purchase.
- b) long-lived asset purchase.
- c) property purchase.
- d) basket purchase.

Answer: d

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA:** Financial Reporting

AACSB: Analytic

103. Which of the following is NOT a characteristic of property, plant, and equipment?

- a) physical substance
- b) used in operations of business
- c) not intended for sale
- d) held for sale

Answer: d

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA:** Financial Reporting

AACSB: Analytic

104. The cost of property, plant, and equipment includes all of the following items EXCEPT

- a) annual maintenance.
- b) purchase price.
- c) installation fee.
- d) freight charges.

Answer: a

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA:** Financial Reporting

AACSB: Analytic

- 105. Which of the following items should NOT be capitalized?
- a) insurance paid while item is in transit
- b) land surveying fees
- c) building permits
- d) truck licence

Answer: d

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA**: Financial Reporting

106. Which of the following items should NOT be included in the cost of land?

- a) removal of old building
- b) legal fees
- c) clearing and draining land
- d) structural additions on land

Answer: d

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA:** Financial Reporting

AACSB: Analytic

107. Which of the following items qualify as land improvements?

- a) underground sprinkler
- b) building
- c) surveying fees
- d) grading and clearing land

Answer: a

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA: Financial Reporting** 

AACSB: Analytic

- 108. Which of the following items is considered an operating expenditure?
- a) testing new equipment
- b) installing equipment
- c) interest on loan to construct a building
- d) insurance on equipment in use

Answer: d

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA**: Financial Reporting

109. Extra Company purchased land for \$115,000 with the intentions of constructing a new operating facility. The land purchase included a dilapidated building that was removed at a cost of \$16,000. The only salvage value from this old building was some materials that were sold for proceeds of \$4,000. Extra had paid surveying costs of \$1,800 and legal fees related to land transfer of \$6,700. The new building was quickly constructed at a total cost of \$422,000. Permits on the construction of this new facility totalled \$18,000. Insurance premiums of \$9,200 are paid annually. The production manager is currently on-site facilitating the production start-up. This manager has an annual salary of \$85,000. What capital cost is assigned to the land?

a) \$135,500b) \$123,500

c) \$115,000

d) \$127,000

Answer: a

Bloomcode: Application Difficulty: Medium

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA**: Financial Reporting

AACSB: Analytic

110. Extra Company purchased land for \$115,000 with the intention of constructing a new operating facility. The land purchase included a dilapidated building that was removed at a cost of \$16,000. The only salvage value from this old building was some materials that were sold for proceeds of \$4,000. Extra had paid surveying costs of \$1,800 and legal fees related to land transfer of \$6,700. The new building was quickly constructed at a total cost of \$422,000. Permits on the construction of this new facility totalled \$18,000. Insurance premiums of \$9,200 are paid annually. The production manager is currently on-site facilitating the production start-up. This manager has an annual salary of \$85,000. What capital cost is assigned to the new building?

a) \$440,000

b) \$449,200 c) \$452,000

d) \$534,200

Answer: a

Bloomcode: Application Difficulty: Medium

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA:** Financial Reporting

AACSB: Analytic

111. Assume that computer equipment is purchased on August 15, 2024, for \$15,000 cash and a \$60,000 note payable. Related cash expenditures include insurance during shipping, \$750; the annual insurance policy, \$1,125; and installation and testing, \$1,500. What is the cost of the equipment?

- a) \$75,000
- b) \$75,750
- c) \$77,250
- d) \$78,375

Answer: c

Bloomcode: Application Difficulty: Medium

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA:** Financial Reporting

AACSB: Analytic

112. Assume that computer equipment is purchased on August 15, 2024, for \$15,000 cash and a \$60,000 note payable. Related cash expenditures include insurance during shipping, \$750; the annual insurance policy, \$1,125; and installation and testing, \$1,500. Which of the following is the correct entry to record these expenditures?

a) Equipment	78,375	
Prepaid Insurance		
Cash		19,500
Notes Payable		60,000
b) Equipment	75,750	
Prepaid Insurance	1,125	
Cash		16,875
Notes Payable		60,000
c) Equipment	75,000	
Cash		15,000
Notes Payable		60,000
d) Equipment	77,250	
Prepaid Insurance	1,125	
Cash	•	18,375
Notes Payable		60,000

Answer: d

Bloomcode: Application Difficulty: Medium

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA:** Financial Reporting

AACSB: Analytic

113. Assume Mountbatten Manufacturing Company purchased land, a building, and some equipment on July 31, 2024, for \$600,000 cash. The land was appraised at \$202,500, the building at \$405,000, and the equipment at \$67,500. How much of the cost should be allocated to the land? a) \$180,000

b \$600,000

c) \$22,500

d) \$202,500

Answer: a

Bloomcode: Application Difficulty: Medium

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA:** Financial Reporting

AACSB: Analytic

- 114. Assume Mountbatten Manufacturing Company purchased land, a building, and some equipment on July 31, 2024, for \$600,000 cash. The land was appraised at \$202,500, the building at \$405,000, and the equipment at \$67,500. How much of the cost should be allocated to the building?
- a) \$405,000
- b) \$45,000
- c) \$360,000
- d) \$600,000

Answer: c

Bloomcode: Application Difficulty: Medium

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA:** Financial Reporting

AACSB: Analytic

- 115. Assume Mountbatten Manufacturing Company purchased land, a building, and some equipment on July 31, 2024, for \$600,000 cash. The land was appraised at \$202,500, the building at \$405,000, and the equipment at \$67,500. How much of the cost should be allocated to the equipment?
- a) \$600,000
- b) \$60,000
- c) \$67,500
- d) \$7,500

Answer: b

Bloomcode: Application Difficulty: Medium

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA:** Financial Reporting

# AACSB: Analytic

116. On October 1, 2024, Flexie Products Ltd. purchased a new machine for \$78,000. The machine is estimated to have a five-year useful life and a \$6,000 residual value. It is also estimated to have a total useful life of 9,000 hours. It is used 1,500 hours in the year ended December 31, 2024, and 1,950 hours in the year ended December 31, 2025. How much depreciation expense should Flexie Products record in 2024 under the straight-line depreciation method?

a) \$15.600 b) \$14,400 c) \$3,900

d) \$3,600

Answer: d

Bloomcode: Application Difficulty: Medium

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation **CPA**: Financial Reporting

AACSB: Analytic

117. On October 1, 2024, Flexie Products Ltd. purchased a new machine for \$78,000. The machine is estimated to have a five-year useful life and a \$6,000 residual value. It is also estimated to have a total useful life of 9,000 hours. It is used 1,500 hours in the year ended December 31, 2024, and 1,950 hours in the year ended December 31, 2025. How much depreciation expense should Flexie Products record in 2025 under the straight-line depreciation method?

a) \$6,000 b) \$16,800

c) \$14,400

d) \$15,600

Answer: c

Bloomcode: Application Difficulty: Medium

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation **CPA**: Financial Reporting

AACSB: Analytic

118. On October 1, 2024, Flexie Products Ltd. purchased a new machine for \$78,000. The machine is estimated to have a five-year useful life and a \$6,000 residual value. It is also estimated to have a total useful life of 9,000 hours. It is used 1,500 hours in the year ended December 31, 2024, and 1,950 hours in the year ended December 31, 2025. How much depreciation expense should Flexie Products record in 2024 under the double diminishing-balance depreciation method?

a) \$7,200

b) \$7,800

c) \$28,800d) \$31,200

Answer: b

Bloomcode: Application Difficulty: Medium

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA:** Financial Reporting

AACSB: Analytic

119. On October 1, 2024, Flexie Products Ltd. purchased a new machine for \$78,000. The machine is estimated to have a five-year useful life and a \$6,000 residual value. It is also estimated to have a total useful life of 9,000 hours. It is used 1,500 hours in the year ended December 31, 2024, and 1,950 hours in the year ended December 31, 2025. How much depreciation expense should Flexie Products record in 2025 under the double diminishing-balance depreciation method?

- a) \$19,680
- b) \$28,320
- c) \$31,200
- d) \$28,080

Answer: d

Bloomcode: Application Difficulty: Medium

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA:** Financial Reporting

AACSB: Analytic

120. On October 1, 2024, Flexie Products Ltd. purchased a new machine for \$78,000. The machine is estimated to have a five-year useful life and a \$6,000 residual value. It is also estimated to have a total useful life of 9,000 hours. It is used 1,500 hours in the year ended December 31, 2024, and 1,950 hours in the year ended December 31, 2025. How much depreciation expense should Flexie Products record in 2024 under the units-of-production depreciation method?

- a) \$12,000
- b) \$31,304
- c) \$13,000
- d) \$33,913

Answer: a

Bloomcode: Application Difficulty: Medium

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA:** Financial Reporting

# AACSB: Analytic

- 121. Which is NOT a method of depreciation?
- a) straight-line
- b) diminishing-balance
- c) specific-identification
- d) units-of-production

Answer: c

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

CPA: Financial Reporting

AACSB: Analytic

- 122. The balance in the Accumulated Depreciation account represents the
- a) cash fund to be used to replace long-lived assets.
- b) amount to be deducted from the cost of the long-lived asset to arrive at its fair value.
- c) amount charged to expense in the current period.
- d) amount charged to expense since the acquisition of the long-lived asset.

Answer: d

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA:** Financial Reporting

AACSB: Analytic

- 123. Which one of the following items is NOT a consideration when recording periodic depreciation expense on long-lived assets?
- a) residual value
- b) estimated useful life
- c) cash needed to replace the long-lived asset
- d) cost

Answer: c

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

CPA: Financial Reporting

- 124. Depreciation is the process of allocating the cost of a long-lived asset (such as property, plant, and equipment) over its service life in a(n)
- a) equal and equitable manner.
- b) accelerated and accurate manner.
- c) systematic and rational manner.
- d) conservative market-based manner.

Answer: c

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation CPA: Financial Reporting

AACSB: Analytic

- 125. The carrying amount of an asset is equal to the
- a) asset's fair value less its cost.
- b) asset's cost less depreciation expense.
- c) replacement cost of the asset.
- d) asset's cost less accumulated depreciation.

Answer: d

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation CPA: Financial Reporting

AACSB: Analytic

- 126. When an asset is fully depreciated, the carrying amount of the asset will be
- a) nil.
- b) equal to the trade-in value.
- c) equal to the residual value.
- d) equal to the fair value.

Answer: c

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA**: Financial Reporting

- 127. Depreciation is a process of
- a) asset devaluation.
- b) cost accumulation.
- c) cost allocation.
- d) asset valuation.

Answer: c

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA: Financial Reporting** 

AACSB: Analytic

128. In calculating depreciation, residual value is

- a) the fair value of a long-lived asset on the date of acquisition.
- b) subtracted from accumulated depreciation to determine the long-lived asset's depreciable cost.
- c) an estimate of what a long-lived asset could be sold for at the end of its useful life.
- d) the amount that a similar replacement asset is expected to cost at the end of the old asset's useful life.

Answer: c

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA:** Financial Reporting

AACSB: Analytic

- 129. When estimating the useful life of an asset, accountants do NOT consider
- a) the cost to replace the asset at the end of its useful life.
- b) obsolescence factors.
- c) expected repairs and maintenance.
- d) the intended use of the asset.

Answer: a

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA**: Financial Reporting

- 130. Equipment was purchased for \$15,000. Freight charges amounted to \$700, and there was a cost of \$2,000 for building a foundation and installing the equipment. It is estimated that the equipment will have a \$3,000 residual value at the end of its five-year useful life. Depreciation expense each year using the straight-line method will be
- a) \$3,540.b) \$2,940.
- c) \$2,460.
- d) \$2,400.

Answer: b

Bloomcode: Application Difficulty: Medium

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation CPA: Financial Reporting

AACSB: Analytic

- 131. A truck was purchased for \$15,000, and it was estimated to have a \$3,000 residual value at the end of its useful life. Monthly depreciation expense of \$250 was recorded using the straight-line method. The annual depreciation rate is
- a) 20%.
- b) 2%.
- c) 8%.
- d) 25%.

Answer: d

Bloomcode: Application Difficulty: Medium

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA:** Financial Reporting

AACSB: Analytic

- 132. A company purchased factory equipment on June 1, 2024, for \$48,000. It is estimated that the equipment will have a \$6,000 residual value at the end of its 10-year useful life. Using the straight-line method of depreciation, the amount to be recorded as depreciation expense at December 31, 2024, is
- a) \$4,800.
- b) \$4,200.
- c) \$2,450.
- d) \$6,000.

Answer: c

Bloomcode: Application Difficulty: Medium

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA:** Financial Reporting

AACSB: Analytic

133. A company purchased office equipment for \$10,000 and estimated a residual value of \$2,000 at the end of its four-year useful life. The constant percentage to be applied against carrying amount each year if the double diminishing-balance method is used is

- a) 20%.
- b) 25%.
- c) 50%.
- d) 4%.

Answer: c

Bloomcode: Application Difficulty: Medium

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA:** Financial Reporting

AACSB: Analytic

- 134. The diminishing-balance method of depreciation produces a(n)
- a) decreasing depreciation expense each period.
- b) increasing depreciation expense each period.
- c) decreasing percentage rate each period.
- d) constant amount of depreciation expense each period.

Answer: a

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA:** Financial Reporting

AACSB: Analytic

- 135. A company purchased a delivery truck for \$60,000 at the beginning of year one. It is estimated that the truck will have a \$10,000 residual value at the end of its estimated five-year useful life. If the company uses the double diminishing-balance method of depreciation, the amount of annual depreciation recorded for the second year after purchase would be
- a) \$9,600.
- b) \$24,000.
- c) \$14,400.
- d) \$12,000.

Answer: c

Bloomcode: Application Difficulty: Medium

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA:** Financial Reporting

AACSB: Analytic

136. A long-lived asset cost \$24,000 and is estimated to have a \$3,000 residual value at the end of its eight-year useful life. The annual depreciation expense recorded for the third year using the double diminishing-balance method would be

a) \$2,010.b) \$3,375.

c) \$2,953.

d) \$2,297.

Answer: b

Bloomcode: Application Difficulty: Medium

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA:** Financial Reporting

AACSB: Analytic

137. A factory machine was purchased for \$20,000 on March 1, 2024. It was estimated that it would have a \$4,000 residual value at the end of its five-year useful life. It was also estimated that the machine would be run 25,000 hours in the five years. If the actual number of machine hours run in 2024 was 4,000 hours and the company uses the units-of-production method of depreciation, the amount of depreciation expense for 2024 would be

a) \$2,133.

b) \$2,560.

c) \$3,200.

d) \$4,000.

Answer: b

Bloomcode: Application Difficulty: Medium

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

CPA: Financial Reporting

AACSB: Analytic

138. Which of the following methods of calculating depreciation uses measures other than time?

- a) straight-line
- b) diminishing-balance

- c) units-of-production
- d) none of these

Answer: c

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA:** Financial Reporting

AACSB: Analytic

- 139. Under International Financial Reporting Standards, the models that companies can choose from to account for their long-lived assets are
- a) cost model and units-of-production model.
- b) units-of-production model and diminishing-balance model.
- c) revaluation model and straight-line model.
- d) cost model and revaluation model.

Answer: d

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA:** Financial Reporting

AACSB: Analytic

- 140. Management should select the depreciation method that
- a) is easiest to apply.
- b) best measures the long-lived asset's fair value over its useful life.
- c) best measures the long-lived asset's contribution to revenue over its useful life.
- d) has been used most often in the past by the company.

Answer: c

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA**: Financial Reporting

- 141. The depreciation method that applies a constant percentage to the carrying amount of an asset in calculating depreciation is
- a) straight-line.
- b) units-of-production.

- c) diminishing-balance.
- d) perpetual-fair value.

Answer: c

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA:** Financial Reporting

AACSB: Analytic

142. On October 1, 2024, Marshwinds Wind Turbine Company places a new asset into service. The cost of the asset is \$8,000 with an estimated five-year life and \$2,000 residual value at the end of its useful life. What is the depreciation expense for 2024 if Marshwinds uses the straight-line method of depreciation?

- a) \$300
- b) \$1,600
- c) \$400
- d) \$800

Answer: a

Bloomcode: Application Difficulty: Medium

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA:** Financial Reporting

AACSB: Analytic

143. On October 1, 2024, Marshwinds Wind Turbine Company places a new asset into service. The cost of the asset is \$8,000 with an estimated five-year life and \$2,000 residual value at the end of its useful life. What is the carrying amount of the long-lived asset on the December 31, 2024, balance sheet assuming that Marshwinds uses the double diminishing-balance method of depreciation?

- a) \$5,200
- b) \$6,000
- c) \$7,200
- d) \$7,600

Answer: c

Bloomcode: Application Difficulty: Medium

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA**: Financial Reporting

144. Which depreciation method is most frequently used in businesses today?

- a) straight-line
- b) diminishing-balance
- c) units-of-production
- d) revaluation

Answer: a

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA:** Financial Reporting

AACSB: Analytic

145. Bay of Fundy Company uses the units-of-production method in calculating depreciation. A new piece of equipment is purchased for \$18,000 that will produce an estimated 100,000 units over its useful life. Estimated residual value at the end of its useful life is \$2,000. What is the depreciable cost per unit?

- a) \$1.60
- b) \$1.80
- c) \$0.16
- d) \$0.18

Answer: c

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA:** Financial Reporting

AACSB: Analytic

146. Units-of-production is an appropriate depreciation method to use when

- a) it is impossible to determine the productivity of the asset.
- b) the asset's use will be constant over its useful life.
- c) the productivity of the asset varies significantly from one period to another.
- d) the company is a manufacturing company.

Answer: c

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA**: Financial Reporting

- 147. The calculation of depreciation using the diminishing-balance method
- a) ignores residual value in determining the amount to which a constant rate is applied.
- b) multiplies a constant percentage times the previous year's depreciation expense.
- c) yields an increasing depreciation expense each period.
- d. multiplies a diminishing percentage times a constant carrying amount.

Answer: a

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA: Financial Reporting** 

AACSB: Analytic

148. Dorchester Company purchased a new van for floral deliveries on July 1, 2024. The van cost \$20,000 with an estimated life of five years and \$5,000 residual value at the end of its useful life. The double diminishing-balance method of depreciation will be used. What is the depreciation expense for 2024?

- a) \$4,000
- b) \$3,000
- c) \$6,000
- d) \$8,000

Answer: a

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA:** Financial Reporting

AACSB: Analytic

149. Dorchester Company purchased a new van for floral deliveries on July 1, 2023. The van cost \$20,000 with an estimated life of five years and \$5,000 residual value at the end of its useful life. The double diminishing-balance method of depreciation will be used. What is the balance of the accumulated depreciation account at the end of 2024?

- a) \$4,800
- b) \$6,400
- c) \$10,400
- d) \$4,000

Answer: c

Bloomcode: Application Difficulty: Medium

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA**: Financial Reporting

AACSB: Analytic

150. Lois Ltd. purchased equipment for \$30,000 on January 1, 2022, and will use the diminishing-balance method of depreciation. It is estimated that the equipment will have a three-year life and a \$3,000 residual value at the end of its useful life. The amount of depreciation expense recognized in the year 2024 will be

- a) \$6,000.b) \$4,444.
- c) \$4,800.
- d) \$2,400.

Answer: b

Bloomcode: Application Difficulty: Medium

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA:** Financial Reporting

AACSB: Analytic

151. A long-lived asset was purchased on January 1 for \$30,000 with an estimated residual value of \$6,000 at the end of its useful life. The current year's depreciation expense is \$3,000 calculated on the straight-line basis and the balance of the accumulated depreciation account at the end of the year is \$15,000. The remaining useful life of the asset is

- a) 10 years.
- b) 8 years.
- c) 5 years.
- d) 3 years.

Answer: d

Bloomcode: Application Difficulty: Medium

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA**: Financial Reporting

- 152. The carrying amount of a long-lived asset is the difference between the
- a) replacement cost of the asset and its cost.
- b) cost of the asset and the amount of depreciation expense for the year.
- c) cost of the asset and the accumulated depreciation to date.
- d) proceeds received from the sale of the asset and its original cost.

Answer: c

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA:** Financial Reporting

AACSB: Analytic

- 153. Use of straight-line depreciation in comparison to the diminishing-balance method results in
- a) a greater amount of depreciation in the earlier years of an asset's useful life.
- b) a greater amount of depreciation in the later years of an asset's useful life.
- c) an equal amount of depreciation over an asset's total useful life.
- d) both b) and c).

Answer: d

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA:** Financial Reporting

AACSB: Analytic

- 154. Use of the units-of-production method of depreciation results in
- a) varying effects on profit as it depends on actual usage each year.
- b) equal effects on profit each year.
- c) the least effect on profit compared to other methods.
- d) the greatest effect on profit compared to other methods.

Answer: a

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA**: Financial Reporting

AACSB: Analytic

- 155. Which of the following methods of depreciation results in the highest cash flow?
- a) straight-line
- b) diminishing-balance
- c) units-of-production
- d) All of these result in the same cash flow.

Answer: d

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA:** Financial Reporting

AACSB: Analytic

156. It is appropriate to stop recording depreciation expense when the asset's

- a) depreciable cost is less than its fair value.
- b) carrying amount exceeds its fair value.
- c) carrying amount equals its residual value.
- d) residual value equals total accumulated depreciation.

Answer: c

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA: Financial Reporting** 

AACSB: Analytic

157. The units-of-production method is ideal for equipment whose activity

- a) can be measured in units of output.
- b) can be measured in units of input.
- c) is consistent from year to year.
- d) is based on time.

Answer: a

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA:** Financial Reporting

AACSB: Analytic

- 158. Which of the following terms describe an asset's cost less its residual value?
- a) carrying amount
- b) net book value
- c) depreciation expense
- d) depreciable amount

Answer: d

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA**: Financial Reporting

AACSB: Analytic

159. Yogi Inc. purchased a specialized machine on April 1, 2024, for a total cost of \$254,000 from Bubu Manufacturing. This machine is expected to become outdated and be replaced in 16 years at which time it will have a residual value of \$25,000. What amount would be reported as depreciation expense for this machine on Yogi Inc.'s December 31, 2024, income statement if Yogi Inc. used the straight-line method of depreciation? Round answer to the nearest dollar.

a) \$15,875

b) \$11,906

c) \$10,734

d) \$14,312

Answer: c

Bloomcode: Application Difficulty: Medium

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA:** Financial Reporting

AACSB: Analytic

160. A change in the estimated useful life of equipment requires

- a) a retroactive change in the amount of periodic depreciation recognized in previous years.
- b) that no change be made in the periodic depreciation so that depreciation amounts are comparable over the life of the asset.
- c) that the amount of periodic depreciation be changed in the current year and in future years.
- d) that profit for the current year be increased.

Answer: c

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Explain the factors that cause changes in periodic depreciation and calculate

revised depreciation for property, plant, and equipment.

Section Reference: Revising Periodic Depreciation

**CPA:** Financial Reporting

- 161. Ranger Company has decided to change the estimate of the useful life of an asset that has been in service for two years. Which of the following statements describes the proper way to revise a useful life estimate?
- a) Revisions in useful life are permitted if approved by the Chartered Professional Accountants.
- b) Retroactive changes must be made to correct previously recorded depreciation.
- c) Depreciation in future years only will be affected by the revision.

d) Depreciation in both the current and future years will be affected by the revision.

Answer: d

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Explain the factors that cause changes in periodic depreciation and calculate

revised depreciation for property, plant, and equipment. Section Reference: Revising Periodic Depreciation

**CPA:** Financial Reporting

AACSB: Analytic

162. Copycat Copy Shop bought equipment for \$16,000 on January 1, 2023. Copycat estimated the useful life to be four years with no residual value, and the straight-line method of depreciation was used. On December 31, 2024, prior to recording depreciation for that year, Copycat decides that the business will use the equipment for a total of five years. What is the depreciation expense for 2024?

- a) \$6,000b) \$2,400
- c) \$3,000
- d) \$4,500

Answer: c

Bloomcode: Application Difficulty: Medium

Learning Objective: Explain the factors that cause changes in periodic depreciation and calculate

revised depreciation for property, plant, and equipment. Section Reference: Revising Periodic Depreciation

**CPA:** Financial Reporting

AACSB: Analytic

- 163. Annual depreciation expense needs to be revised if
- a) there is an impairment loss.
- b) repairs are completed to restore the asset to its prior condition.
- c) insurance premiums on the asset increase.
- d) worn out parts are replaced.

Answer: a

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Explain the factors that cause changes in periodic depreciation and calculate

revised depreciation for property, plant, and equipment. Section Reference: Revising Periodic Depreciation

**CPA**: Financial Reporting

- 164. Property, plant, and equipment are considered impaired if the carrying amount exceeds the asset's
- a) depreciation expense.
- b) fair value.
- c) recoverable amount.
- d) accumulated depreciation.

Answer: c

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Explain the factors that cause changes in periodic depreciation and calculate

revised depreciation for property, plant, and equipment. Section Reference: Revising Periodic Depreciation

**CPA**: Financial Reporting

AACSB: Analytic

165. The revaluation model is allowed under IFRS mainly because it is useful in countries where

- a) there is a high inventory turnover.
- b) companies cannot estimate the fair value of assets.
- c) there is a high inflation rate.
- d) companies cannot determine an appropriate method of depreciation.

Answer: c

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Explain the factors that cause changes in periodic depreciation and calculate

revised depreciation for property, plant, and equipment.

Section Reference: Revising Periodic Depreciation

**CPA:** Financial Reporting

AACSB: Analytic

166. The appropriateness of the depreciation method selected should be reviewed at least

- a) monthly.
- b) annually.
- c) every five years.
- d) every 10 years.

Answer: b

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Explain the factors that cause changes in periodic depreciation and calculate

revised depreciation for property, plant, and equipment.

Section Reference: Revising Periodic Depreciation

**CPA**: Financial Reporting

167. When there is a change in the useful life of an asset, depreciation must be revised if you are using

- a) straight-line depreciation.
- b) units-of-production depreciation.
- c) diminishing-balance depreciation.
- d) any of the above depreciation methods.

Answer: d

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Explain the factors that cause changes in periodic depreciation and calculate

revised depreciation for property, plant, and equipment. Section Reference: Revising Periodic Depreciation

**CPA:** Financial Reporting

AACSB: Analytic

168. Beaches Ltd. reviews its assets every fiscal year for potential asset impairments. In the current year Beaches realizes through its impairment assessment that a specialized machine has a recoverable amount of \$360,500. This asset carries a cost of \$890,000 and up-to-date accumulated depreciation of \$549,200. What amount would be reported as an impairment loss on their current income statement at year end?

- a) \$0
- b) \$340,800
- c) \$360,500
- d) \$19,700

Answer: a

Bloomcode: Application Difficulty: Medium

Learning Objective: Explain the factors that cause changes in periodic depreciation and calculate

revised depreciation for property, plant, and equipment. Section Reference: Revising Periodic Depreciation

**CPA**: Financial Reporting

AACSB: Analytic

- 169. Under the revaluation method, the carrying amount of property, plant, and equipment is defined as
- a) cost less accumulated depreciation.
- b) fair value less accumulated depreciation less accumulated impairment losses.
- c) cost less depreciation expense less impairment loss.
- d) cost less depreciations expense.

Answer: b

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Explain the factors that cause changes in periodic depreciation and calculate

revised depreciation for property, plant, and equipment. Section Reference: Revising Periodic Depreciation

**CPA**: Financial Reporting

AACSB: Analytic

170. On August 1, 2009, just after its year end, Blossoms Beauties purchased equipment for \$750,000. The company used straight-line depreciation to allocate the cost of this equipment, estimating a residual value of \$75,000 and a useful life of 30 years. After 15 years of use, on August 1, 2024, the company was forced to replace the entire motor at a cost of \$37,500 cash. The residual value was expected to remain at \$75,000 but the total useful life was now expected to increase to 40 years. Which of the following is the correct journal entry to record depreciation for the year ended July 31, 2024?

a) Depreciation Expense	22,500	
Accumulated Depreciation-Equipment		22,500
b) Equipment	26,250	
Accumulated Depreciation-Equipment		26,250
c) Accumulated Depreciation-Equipment	23,750	
Depreciation Expense		23,750
d) Depreciation Expense	25,000	
Accumulated Depreciation-Equipment		25,000

Answer: a

Bloomcode: Application Difficulty: Medium

Learning Objective: Explain the factors that cause changes in periodic depreciation and calculate

revised depreciation for property, plant, and equipment. Section Reference: Revising Periodic Depreciation

**CPA:** Financial Reporting

AACSB: Analytic

171. On August 1, 2009, just after its year end, Blossoms Beauties purchased equipment for \$750,000. The company used straight-line depreciation to allocate the cost of this equipment, estimating a residual value of \$75,000 and a useful life of 30 years. After 15 years of use, on August 1, 2024, the company was forced to replace the entire motor at a cost of \$37,500 cash. The residual value was expected to remain at \$75,000 but the total useful life was now expected to increase to 40 years. Which of the following is the correct journal entry to record the cost of the addition on August 1, 2024?

a) Repair Expense	37,500	
Cash		37,500
b) Equipment	37,500	
Accumulated Depreciation-Equipment		37,500
c) Depreciation Expense	37,500	
Cash		37,500
d) Equipment	37,500	

Answer: d

Bloomcode: Application Difficulty: Medium

Learning Objective: Explain the factors that cause changes in periodic depreciation and calculate

revised depreciation for property, plant, and equipment. Section Reference: Revising Periodic Depreciation

**CPA:** Financial Reporting

AACSB: Analytic

172. On August 1, 2009, just after its year end, Blossoms Beauties purchased equipment for \$750,000. The company used straight-line depreciation to allocate the cost of this equipment, estimating a residual value of \$75,000 and a useful life of 30 years. After 15 years of use, on August 1, 2024, the company was forced to replace the entire motor at a cost of \$37,500 cash. The residual value was expected to remain at \$75,000 but the total useful life was now expected to increase to 40 years. Which of the following is the correct journal entry to record depreciation for the year ended July 31, 2025?

a) Depreciation Expense	17,813	
Cash		17,813
b) Equipment	23,750	
Accumulated Depreciation–Equipment		23,750
c) Depreciation Expense	28,500	
Cash		28,500
d) Depreciation Expense	15,000	
Accumulated Depreciation		15,000

Answer: d

Bloomcode: Application Difficulty: Medium

Learning Objective: Explain the factors that cause changes in periodic depreciation and calculate

revised depreciation for property, plant, and equipment.

Section Reference: Revising Periodic Depreciation

**CPA**: Financial Reporting

AACSB: Analytic

- 173. Which of the following is NOT required information to calculate new annual depreciation expense, at the time of a change?
- a) revised residual value
- b) asset's original cost plus the accumulated depreciation to date, plus capital expenditures, minus any impairment losses
- c) asset's original useful life minus the number of years used plus or minus the change in estimate
- d) asset's carrying amount

Answer: b

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Explain the factors that cause changes in periodic depreciation and calculate

revised depreciation for property, plant, and equipment. Section Reference: Revising Periodic Depreciation

**CPA**: Financial Reporting

AACSB: Analytic

174. Assume that on December 31, 2024, Ragpar Company reviews its equipment for possible impairment. The equipment has a cost of \$400,000 and accumulated depreciation of \$100,000. The equipment's recoverable amount is currently \$250,000. How much is the impairment loss?

- a) \$150,000
- b) \$100,000
- c) \$50,000
- d) \$0

Answer: c

Bloomcode: Application Difficulty: Medium

Learning Objective: Explain the factors that cause changes in periodic depreciation and calculate

revised depreciation for property, plant, and equipment. Section Reference: Revising Periodic Depreciation

**CPA**: Financial Reporting

AACSB: Analytic

175. A gain on disposal of an asset occurs when the proceeds of the sale are greater than the

- a) loan outstanding on the asset sold.
- b) fair value of the asset sold.
- c) carrying amount of the asset sold.
- d) the original cost of the asset sold.

Answer: c

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Demonstrate how to account for property, plant, and equipment disposals.

Section Reference: Disposals of Property, Plant, and Equipment

**CPA**: Financial Reporting

- 176. A gain or loss on disposal of a long-lived asset is determined by comparing the
- a) replacement cost of the asset with the asset's original cost.
- b) carrying amount of the asset with the asset's original cost.
- c) original cost of the asset with the proceeds received from its sale.
- d) carrying amount of the asset with the proceeds received from its sale.

Answer: d

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Demonstrate how to account for property, plant, and equipment disposals.

Section Reference: Disposals of Property, Plant, and Equipment

**CPA**: Financial Reporting

AACSB: Analytic

177. If a long-lived asset is sold before it is fully depreciated, and the proceeds received is less than the asset's carrying amount,

- a) a gain on disposal occurs.
- b) a loss on disposal occurs.
- c) there is no gain or loss on disposal.
- d) additional depreciation expense must be recorded.

Answer: b

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Demonstrate how to account for property, plant, and equipment disposals.

Section Reference: Disposals of Property, Plant, and Equipment

**CPA:** Financial Reporting

AACSB: Analytic

178. If a long-lived asset is sold and the carrying amount is higher than the proceeds received,

- a) profit will be increased.
- b) profit will be decreased.
- c) there will be no effect on profit.
- d) the current ratio will decrease.

Answer: b

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Demonstrate how to account for property, plant, and equipment disposals.

Section Reference: Disposals of Property, Plant, and Equipment

**CPA**: Financial Reporting

AACSB: Analytic

179. A company sells a long-lived asset that originally cost \$150,000 for \$50,000 on December 31, 2024. The accumulated depreciation account had a balance of \$60,000 after the current year's depreciation of \$15,000 had been recorded. The company should recognize a

- a) \$100,000 loss on disposal.
- b) \$40,000 gain on disposal.
- c) \$40,000 loss on disposal.
- d) \$25,000 loss on disposal.

Answer: c

Bloomcode: Application Difficulty: Medium

Learning Objective: Demonstrate how to account for property, plant, and equipment disposals.

Section Reference: Disposals of Property, Plant, and Equipment

**CPA**: Financial Reporting

AACSB: Analytic

180. If disposal of a long-lived asset occurs during the year, depreciation is

- a) not recorded for the year.
- b) recorded for the whole year.
- c) recorded for the fraction of the year to the date of the disposal.
- d) not recorded if the asset is scrapped.

Answer: c

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Demonstrate how to account for property, plant, and equipment disposals.

Section Reference: Disposals of Property, Plant, and Equipment

**CPA:** Financial Reporting

AACSB: Analytic

181. If a fully depreciated long-lived asset is still used by a company, the

- a) estimated remaining useful life must be revised to calculate the correct revised depreciation.
- b) asset is removed from the books.
- c) accumulated depreciation account is removed from the books but the asset account remains.
- d) asset and the accumulated depreciation continue to be reported on the balance sheet without adjustment until the asset is retired.

Answer: d

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Demonstrate how to account for property, plant, and equipment disposals.

Section Reference: Disposals of Property, Plant, and Equipment

**CPA**: Financial Reporting

AACSB: Analytic

182. Which of the following statements is NOT true when a fully depreciated long-lived asset is retired?

- a) The long-lived asset's carrying amount is equal to its estimated residual value.
- b) The accumulated depreciation account is debited.
- c) The asset account is credited.
- d) The long-lived asset's original cost equals its carrying amount.

Answer: d

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Demonstrate how to account for property, plant, and equipment disposals.

Section Reference: Disposals of Property, Plant, and Equipment

**CPA**: Financial Reporting

AACSB: Analytic

183. If a long-lived asset is retired before it is fully depreciated, and no residual or scrap value is received,

- a) a gain on disposal will be recorded.
- b) phantom depreciation must be taken as though the asset were still on the books.
- c) a loss on disposal will be recorded.
- d) no gain or loss on disposal will be recorded.

Answer: c

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Demonstrate how to account for property, plant, and equipment disposals.

Section Reference: Disposals of Property, Plant, and Equipment

**CPA**: Financial Reporting

AACSB: Analytic

184. If the carrying amount of an asset equals its sales value at the date of sale,

- a) a gain on disposal is recorded.
- b) no gain or loss on disposal is recorded.
- c) the long-lived asset is fully depreciated.
- d) a loss on disposal is recorded.

Answer: b

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Demonstrate how to account for property, plant, and equipment disposals.

Section Reference: Disposals of Property, Plant, and Equipment

**CPA**: Financial Reporting

AACSB: Analytic

185. A truck costing \$47,000 was destroyed during a flood. At the date of the flood, the accumulated depreciation on the truck was \$22,000. An insurance cheque for \$35,000 was received based on the replacement cost of the truck. The entry to record the insurance proceeds and the disposition of the truck will include a

- a) gain on disposal of \$10,000.
- b) credit to the Truck account of \$12,000.

- c) credit to the Accumulated Depreciation account for \$22,000.
- d) gain on disposal of \$25,000.

Answer: a

Bloomcode: Application Difficulty: Medium

Learning Objective: Demonstrate how to account for property, plant, and equipment disposals.

Section Reference: Disposals of Property, Plant, and Equipment

**CPA:** Financial Reporting

AACSB: Analytic

186. On July 1, 2024, The Who Co. sells equipment for \$22,000. The equipment originally cost \$60,000, had an estimated 5-year life, and had an expected residual value of \$10,000. The accumulated depreciation account had a balance of \$35,000 on December 31, 2023, using the straight-line method. The gain or loss on disposal is

- a) \$3,000 gain.
- b) \$2,000 loss.
- c) \$3,000 loss.
- d) \$2,000 gain.

Answer: d

Bloomcode: Application Difficulty: Medium

Learning Objective: Demonstrate how to account for property, plant, and equipment disposals.

Section Reference: Disposals of Property, Plant, and Equipment

**CPA**: Financial Reporting

AACSB: Analytic

187. In an exchange of assets, the new asset is recorded at

- a) the fair value of the asset given up.
- b) the fair value of the new asset.
- c) the carrying amount of the asset given up plus any cash paid (or less any cash received).
- d) the fair value of the asset given up plus any cash paid (or less any cash received).

Answer: d

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Demonstrate how to account for property, plant, and equipment disposals.

Section Reference: Disposals of Property, Plant, and Equipment

**CPA**: Financial Reporting

AACSB: Analytic

188. Big Wave Inc. exchanged an old vehicle for a new vehicle on August 31, 2024. The original cost of the vehicle was \$45,000 on January 1, 2020. Depreciation was calculated using the straight-line

method over a 10-year useful life, with an estimated residual value of \$3,000. The fair value of the old vehicle on August 31, 2024, was \$21,500. The list price of the new vehicle was \$30,000. Big Wave received a \$24,000 trade-in allowance from the dealership and paid \$6,000 cash for the new vehicle. The new vehicle should be recorded on Big Wave's books at

- a) \$30,000.
- b) \$27,500.
- c) \$24,000.
- d) \$23,500.

Answer: b

Bloomcode: Application Difficulty: Medium

Learning Objective: Demonstrate how to account for property, plant, and equipment disposals.

Section Reference: Disposals of Property, Plant, and Equipment

**CPA:** Financial Reporting

AACSB: Analytic

189. Big Wave Inc. exchanged an old vehicle for a new vehicle on August 31, 2024. The original cost of the vehicle was \$45,000 on January 1, 2020. Depreciation was calculated using the straight-line method over a 10-year useful life, with an estimated residual value of \$3,000. The fair value of the old vehicle on August 31, 2024, was \$21,500. The list price of the new vehicle was \$30,000. Big Wave received a \$24,000 trade in allowance from the dealership and paid \$6,000 cash for the new vehicle. As a result of this transaction, the company would record which of the following?

- a) Dr. Loss on Disposal \$3,900
- b) Cr. Vehicles \$23,500
- c) Cr. Gain on Disposal \$3,900
- d) Cr. Cash \$24,000

Answer: a

Bloomcode: Application Difficulty: Medium

Learning Objective: Demonstrate how to account for property, plant, and equipment disposals.

Section Reference: Disposals of Property, Plant, and Equipment

**CPA**: Financial Reporting

AACSB: Analytic

190. Mo Bounce Company's delivery truck, which originally cost \$28,000, was destroyed by fire. At the time of the fire, the balance of the accumulated depreciation account amounted to \$19,000. The company received a \$16,000 reimbursement from its insurance company. The gain or loss as a result of the fire was

- a) \$12,000 loss.
- b) \$7,000 loss.
- c) \$12,000 gain.
- d) \$7,000 gain.

Answer: d

Bloomcode: Application Difficulty: Medium

Learning Objective: Demonstrate how to account for property, plant, and equipment disposals.

Section Reference: Disposals of Property, Plant, and Equipment

**CPA: Financial Reporting** 

AACSB: Analytic

191. A loss on disposal of a long-lived asset is reported in the financial statements

- a) as an increase to depreciation expense in the income statement.
- b) in the operating expenses section of the income statement.
- c) as a direct increase to the capital account on the balance sheet.
- d) as a direct decrease to the capital account on the balance sheet.

Answer: b

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Demonstrate how to account for property, plant, and equipment disposals.

Section Reference: Disposals of Property, Plant, and Equipment

**CPA:** Financial Reporting

AACSB: Analytic

192. The Breakfast Club Company purchased land and building on January 1, 2006, for a combined price of \$285,000. The Breakfast Club Company allocated 75% of the purchase price to the building and 25% to the land to approximate their individual fair values. The building was depreciated using the double diminishing-balance method and accumulated depreciation to date was correctly calculated as \$190,000. The land and building were subsequently sold on June 18, 2024, for a combined price of \$650,000. What gain or loss on disposal of these assets would be reported in 2024?

- a) gain of \$95,000
- b) gain of \$555,000
- c) gain of \$578,750
- d) gain of \$626,250

Answer: b

Bloomcode: Application Difficulty: Medium

Learning Objective: Demonstrate how to account for property, plant, and equipment disposals.

Section Reference: Disposals of Property, Plant, and Equipment

**CPA**: Financial Reporting

AACSB: Analytic

193. The Weekend Company owns specialized equipment with an original cost of \$235,000. The company has fully depreciated the asset over the past five years and has now made the decision to retire the asset. Which journal entry would be required to record the retirement of this equipment?

- a) Debit Equipment and credit Accumulated Depreciation-Equipment for \$235,000
- b) Debit Depreciation Expense and credit Accumulated Depreciation-Equipment for \$235,000
- c) Debit Accumulated Depreciation–Equipment and credit Depreciation Expense for \$235,000
- d) Debit Accumulated Depreciation-Equipment and credit Equipment for \$235,000

Answer: d

Bloomcode: Application Difficulty: Medium

Learning Objective: Demonstrate how to account for property, plant, and equipment disposals.

Section Reference: Disposals of Property, Plant, and Equipment

**CPA**: Financial Reporting

AACSB: Analytic

194. Floral Gifts purchased a truck on January 2, 2020, for \$90,000. The truck had been depreciated on a straight-line basis with an estimated residual value of \$5,000 and an estimated useful life of five years. Floral Gifts has a December 31 year end. Which of the following is the correct journal entry assuming that Floral Gifts retires the truck on January 2, 2025?

a) Accumulated Depreciation-Vehicles	85,000	
Loss on Disposal	5,000	
Vehicles		90,000
b) Depreciation Expense	90,000	
Accumulated Depreciation-Vehicles		85,000
Gain on Disposal		5,000
c) Accumulated Depreciation-Vehicles	90,000	
Vehicles		90,000
d) Accumulated Depreciation-Vehicles	90,000	
Gain on Disposal		5,000
Vehicles		85,000

Answer: a

Bloomcode: Application Difficulty: Medium

Learning Objective: Demonstrate how to account for property, plant, and equipment disposals.

Section Reference: Disposals of Property, Plant, and Equipment

**CPA:** Financial Reporting

AACSB: Analytic

195. Floral Gifts purchased a truck on January 2, 2020, for \$90,000. The truck had been depreciated on a straight-line basis with an estimated residual value of \$5,000 and an estimated useful life of five years. Floral Gifts has a December 31 year end. Which of the following is the correct journal entry assuming that Floral Gifts sells the truck on April 1, 2024, for \$11,200 cash?

a) Cash	11,200	
Accumulated Depreciation-Vehicles	78,800	
Vehicles		90,000
b) Cash	11,200	
Accumulated Depreciation–Vehicles	77,250	

Loss on Disposal	1,550	
Vehicles	,	90.000
c) Accumulated Depreciation-Vehicles	90,000	,
Vehicles		90,000
d) Cash	11,200	,
Accumulated Depreciation-Vehicles	72,250	
Loss on Disposal	6,550	
Vehicles		90,000

Answer: d

Bloomcode: Application Difficulty: Medium

Learning Objective: Demonstrate how to account for property, plant, and equipment disposals.

Section Reference: Disposals of Property, Plant, and Equipment

**CPA:** Financial Reporting

AACSB: Analytic

196. Floral Gifts purchased a truck on January 2, 2020, for \$90,000. The truck had been depreciated on a straight-line basis with an estimated residual value of \$5,000 and an estimated useful life of five years. Floral Gifts has a December 31 year end. Which of the following is the correct journal entry assuming that Floral Gifts sells the truck on October 1, 2024, for \$11,200 cash?

8,367
,
,
0= 000
85,000
90,000
1,950
90,000
3,367
90,000

Answer: c

Bloomcode: Application Difficulty: Medium

Learning Objective: Demonstrate how to account for property, plant, and equipment disposals.

Section Reference: Disposals of Property, Plant, and Equipment

**CPA**: Financial Reporting

197. Floral Gifts purchased a truck on January 2, 2020, for \$90,000. The truck had been depreciated on a straight-line basis with an estimated residual value of \$5,000 and an estimated useful life of five years. Floral Gifts has a December 31 year end. Which of the following is the correct journal entry assuming that Floral Gifts exchanges the old truck, plus \$50,000 cash, for a new truck on July 1, 2024? The old truck has a fair value of \$10,200. The new truck has a list price of \$75,000, but the dealer gives Floral Gifts a \$25,000 trade-in allowance on the old truck.

a) Vehicles (cost of new)	75,000	
Accumulated Depreciation-Vehicles	76,500	
Gain on Disposal		11,500
Vehicles (cost of old)		90,000
Cash		50,000
b) Depreciation Expense	8,500	
Accumulated Depreciation–Vehicles		8,500
Vehicles (cost of new)	60,200	
Accumulated Depreciation-Vehicles	76,500	
Loss on Disposal	3,300	
Vehicles (cost of old)		90,000
Cash		50,000
c) Depreciation Expense	12,617	
Accumulated Depreciation–Vehicles		12,617
Vehicles (cost of new)	60,200	
Accumulated Depreciation-Vehicles	77,917	
Loss on Disposal	1,883	
Vehicles (cost of old)		90,000
Cash		50,000
d) Vehicles (cost of new)	75,000	
Accumulated Depreciation-Vehicles	77,917	
Gain on Disposal		12,917
Vehicles (cost of old)		90,000
Cash		50,000

Answer: b

Bloomcode: Application Difficulty: Medium

Learning Objective: Demonstrate how to account for property, plant, and equipment disposals.

Section Reference: Disposals of Property, Plant, and Equipment

**CPA**: Financial Reporting

AACSB: Analytic

198. Floral Gifts purchased a truck on January 2, 2020, for \$90,000. The truck had been depreciated on a straight-line basis with an estimated residual value of \$5,000 and an estimated useful life of five years. Floral Gifts has a December 31 year end. Assuming there is no commercial substance, how much should the new long-lived asset be recorded for given that Floral Gifts exchanges the old truck for a new truck on July 1, 2024?

a) The carrying amount of the old truck that was given up, plus any cash paid (or less any cash received).

- b) The list price of the new truck only.
- c) The carrying amount of the old truck only that was given up.
- d) The list price of the new truck, plus any cash paid (or less any cash received).

Answer: a

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Demonstrate how to account for property, plant, and equipment disposals.

Section Reference: Disposals of Property, Plant, and Equipment

**CPA**: Financial Reporting

AACSB: Analytic

199. Mining Plus Company invests \$7 million in a mine that is estimated to have 5 million tonnes of ore and a \$250,000 residual value. In the first year, 20,000 tonnes are extracted but only 7,500 tonnes are sold. How much is the depletion amount per tonne?

- a) \$0.68 per tonne
- b) \$1.35 per tonne
- c) \$0.71 per tonne
- d) \$1.40 per tonne

Answer: b

Bloomcode: Application Difficulty: Medium

Learning Objective: Record natural resource transactions and calculate depletion.

Section Reference: Natural Resources

**CPA**: Financial Reporting

AACSB: Analytic

200. Mining Plus Company invests \$7 million in a mine that is estimated to have 5 million tonnes of ore and a \$250,000 residual value. In the first year, 20,000 tonnes are extracted but only 7,500 tonnes are sold. How much is the total depletion for the year?

- a) \$10,125
- b) \$10,500
- c) \$16,875
- d) \$27,000

Answer: d

Bloomcode: Application Difficulty: Medium

Learning Objective: Record natural resource transactions and calculate depletion.

Section Reference: Natural Resources

**CPA**: Financial Reporting

201. Mining Plus Company invests \$7 million in a mine that is estimated to have 5 million tonnes of ore and a \$250,000 residual value. In the first year, 20,000 tonnes are extracted but only 7,500 tonnes are sold. How much is the depletion amount to be allocated to inventory?

a) \$16,875

b) \$17,500

c) \$10,125

d) \$10,500

Answer: a

Bloomcode: Application Difficulty: Medium

Learning Objective: Record natural resource transactions and calculate depletion.

Section Reference: Natural Resources

**CPA**: Financial Reporting

AACSB: Analytic

202. Mining Plus Company invests \$7 million in a mine that is estimated to have 5 million tonnes of ore and a \$250,000 residual value. In the first year, 20,000 tonnes are extracted but only 7,500 tonnes are sold. How much is the depletion amount to be allocated to cost of goods sold?

- a) \$16,875
- b) \$17,500 c) \$10,125
- d) \$10,500

Answer: c

Bloomcode: Application Difficulty: Medium

Learning Objective: Record natural resource transactions and calculate depletion.

Section Reference: Natural Resources

**CPA:** Financial Reporting

AACSB: Analytic

203. Major Mines purchased a mine for \$5.5 million that is estimated to have 40 million tonnes of ore and a \$400,000 residual value. In the first year, 3 million tonnes of ore are extracted. Which of the following is the correct journal entry to record the depletion for the first year?

, , ,	,	
a) Inventory	412,500	
Accumulated Depletion-Resource		412,500
b) Depletion Expense	412,500	
Accumulated Depletion-Resource		412,500
c) Inventory	382,500	
Accumulated Depletion-Resource		382,500
d) Depletion Expense	382,500	
Accumulated Depletion-Resource		382,500

Answer: c

Bloomcode: Application Difficulty: Medium

Learning Objective: Record natural resource transactions and calculate depletion.

Section Reference: Natural Resources

**CPA:** Financial Reporting

AACSB: Analytic

204. Natural resources are frequently referred to as wasting assets because

- a) they are worthless.
- b) they are physically extracted in operations and are replaceable only by an act of nature.
- c) there is a lot of inefficiency in their use in operations.
- d) there is a lot of spoilage when they are extracted.

Answer: b

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Record natural resource transactions and calculate depletion.

Section Reference: Natural Resources

**CPA:** Financial Reporting

AACSB: Analytic

## 205. Natural resource depletion is

- a) a decrease in fair value of natural resources.
- b) the amount of spoilage that occurs when natural resources are extracted.
- c) the process of allocating the cost of natural resources extracted and sold to expense.
- d) the method used to record unsuccessful oil well explorations.

Answer: c

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Record natural resource transactions and calculate depletion.

Section Reference: Natural Resources

**CPA:** Financial Reporting

AACSB: Analytic

206. Natural resource depletion is most often a function of

- a) the expected economic life of the natural resource.
- b) the expected period over which the resource is expected to be exhausted.
- c) the units of natural resource extracted during the period.
- d) the number of years expected to be in operations.

Answer: c

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Record natural resource transactions and calculate depletion.

Section Reference: Natural Resources

**CPA:** Financial Reporting

AACSB: Analytic

207. All of the following are examples of wasting assets EXCEPT a

- a) coal mine.
- b) timber stand.
- c) logging truck.
- d) gold mine.

Answer: c

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Record natural resource transactions and calculate depletion.

Section Reference: Natural Resources

**CPA**: Financial Reporting

AACSB: Analytic

208. The method most commonly used to calculate natural resource depletion is the

- a) straight-line method.
- b) diminishing-balance method.
- c) units-of-production method.
- d) revaluation method.

Answer: c

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Record natural resource transactions and calculate depletion.

Section Reference: Natural Resources

**CPA**: Financial Reporting

AACSB: Analytic

209. In calculating natural resource depletion, residual value is

- a) always immaterial.
- b) ignored.
- c) impossible to estimate.
- d) included in the calculation.

Answer: d

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Record natural resource transactions and calculate depletion.

Section Reference: Natural Resources

**CPA**: Financial Reporting

AACSB: Analytic

210. If a mining company extracts 1,500,000 tonnes in a period but only sells 1,200,000 tonnes,

- a) accumulated depletion on the mine is based on the 1,200,000 tonnes.
- b) depletion included in cost of goods sold is based on the 1,500,000 tonnes extracted.
- c) depletion included in cost of goods sold is based on the 1,200,000 tonnes extracted and sold.
- d) a separate accumulated depletion account is set up to record depletion on the 300,000 tonnes extracted but not sold.

Answer: c

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Record natural resource transactions and calculate depletion.

Section Reference: Natural Resources

**CPA**: Financial Reporting

AACSB: Analytic

- 211. A coal company invests \$12 million in a mine estimated to have 20 million tonnes of coal and no residual value. It is expected that the mine will be in operation for five years. In the first year, 1,000,000 tonnes of coal are extracted and sold. What is the depletion included in cost of goods sold for the first year?
- a) \$600,000
- b) \$240,000
- c) \$60,000
- d) It cannot be determined from the information provided.

Answer: a

Bloomcode: Application Difficulty: Medium

Learning Objective: Record natural resource transactions and calculate depletion.

Section Reference: Natural Resources

**CPA:** Financial Reporting

AACSB: Analytic

- 212. Depletion of natural resources is initially debited to
- a) Cost of Goods Sold.
- b) Inventory.
- c) Depletion Expense.
- d) Loss on Extraction of Resources.

Answer: b

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Record natural resource transactions and calculate depletion.

Section Reference: Natural Resources

**CPA:** Financial Reporting

AACSB: Analytic

- 213. Which of the following would NOT be considered a natural resource?
- a) mineral deposit
- b) herd of cows
- c) gravel pit
- d) timberlands

Answer: b

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Record natural resource transactions and calculate depletion.

Section Reference: Natural Resources

**CPA**: Financial Reporting

AACSB: Analytic

214. On July 1, 2024, Yukon Minerals Co. purchased the mineral rights to a granite deposit for \$700,000. It is estimated that the recoverable granite will be 400,000 tonnes. During 2024, 100,000 tonnes of granite was extracted and 60,000 tonnes were sold. The amount of the depletion expense to be included in cost of goods sold for 2024 would be

- a) \$87,500.
- b) \$52,500.
- c) \$105,000.
- d) \$175,000.

Answer: c

Bloomcode: Application Difficulty: Medium

Learning Objective: Record natural resource transactions and calculate depletion.

Section Reference: Natural Resources

**CPA:** Financial Reporting

AACSB: Analytic

- 215. The calculated annual depletion expense is initially debited to
- a) Inventory.
- b) Natural Resource Property.
- c) Accumulated Depletion.
- d) Cash.

Answer: a

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Record natural resource transactions and calculate depletion.

Section Reference: Natural Resources

**CPA:** Financial Reporting

AACSB: Analytic

216. Helios invested \$6 million for the rights to explore and extract natural resources from land in Ukraine. The company estimated that a total of 1.5 million tonnes of ore would be extracted from the property. The company extracted 50,000 tonnes of ore in its first year of operations. What entry would be necessary to record depletion?

- a) Debit to Natural Resource Property and credit to Accumulated Depletion–Mineral Resources for \$200,000
- b) Debit to Inventory and credit to Accumulated Depletion-Mineral Resources for \$200,000
- c) Debit to Natural Resource Property and credit to Accumulated Depletion–Mineral Resources for \$6,000,000
- d) Debit to Inventory and credit to Accumulated Depletion-Mineral Resources for \$6,000,000

Answer: b

Bloomcode: Application Difficulty: Medium

Learning Objective: Record natural resource transactions and calculate depletion.

Section Reference: Natural Resources

**CPA**: Financial Reporting

AACSB: Analytic

217. Which of the following assets has indefinite life?

- a) land improvements
- b) patent
- c) goodwill
- d) copyright

Answer: c

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Identify the basic accounting issues for intangible assets and goodwill.

Section Reference: Intangible Assets and Goodwill

**CPA:** Financial Reporting

AACSB: Analytic

218. Which of the following statements is CORRECT?

- a) All research and development costs should be capitalized.
- b) Development costs are always capitalized.
- c) Research costs should always be expensed as incurred.
- d) All research and development costs should be expensed as incurred.

Answer: c

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Identify the basic accounting issues for intangible assets and goodwill.

Section Reference: Intangible Assets and Goodwill

**CPA:** Financial Reporting

AACSB: Analytic

- 219. Intangible assets are the rights and privileges that result from ownership of long-lived assets, many of which
- a) must be generated internally.
- b) are depreciable natural resources.
- c) have been exchanged at a gain.
- d) do not have physical substance.

Answer: d

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Identify the basic accounting issues for intangible assets and goodwill.

Section Reference: Intangible Assets and Goodwill

**CPA**: Financial Reporting

AACSB: Analytic

- 220. If an intangible asset with an indefinite life becomes impaired, the asset must be
- a) written down to cost.
- b) written down to fair value.
- c) sold at its net realizable value.
- d) No adjustment is required and a loss will be recorded when the intangible asset is sold.

Answer: b

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Identify the basic accounting issues for intangible assets and goodwill.

Section Reference: Intangible Assets and Goodwill

**CPA**: Financial Reporting

AACSB: Analytic

- 221. If a company incurs legal costs in successfully defending its patent, these costs are recorded by debiting
- a) Legal Expense.
- b) a Loss on Intangibles account.
- c) the Patent account.
- d) an operating expense account.

Answer: c

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Identify the basic accounting issues for intangible assets and goodwill.

Section Reference: Intangible Assets and Goodwill

**CPA:** Financial Reporting

AACSB: Analytic

- 222. The cost of successfully defending a patent in an infringement suit should be
- a) charged to Legal Expenses.
- b) deducted from the carrying amount of the patent.
- c) added to the cost of the patent.
- d) recognized as a loss in the current period.

Answer: c

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Identify the basic accounting issues for intangible assets and goodwill.

Section Reference: Intangible Assets and Goodwill

**CPA:** Financial Reporting

AACSB: Analytic

- 223. An asset that CANNOT be sold individually is
- a) a patent.
- b) goodwill.
- c) a copyright.
- d) a trade name.

Answer: b

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Identify the basic accounting issues for intangible assets and goodwill.

Section Reference: Intangible Assets and Goodwill

**CPA**: Financial Reporting

AACSB: Analytic

## 224. Goodwill can be recorded

- a) when customers keep returning because they are satisfied with the company's products.
- b) when the company acquires a good location for its business.
- c) when the company has exceptional management.
- d) only when an entire business is purchased.

Answer: d

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Identify the basic accounting issues for intangible assets and goodwill.

Section Reference: Intangible Assets and Goodwill

**CPA:** Financial Reporting

AACSB: Analytic

225. Which is NOT a characteristic of goodwill?

- a) It can be sold.
- b) It is never amortized.
- c) It is tested for impairment annually.
- d) It has indefinite life.

Answer: a

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Identify the basic accounting issues for intangible assets and goodwill.

Section Reference: Intangible Assets and Goodwill

**CPA:** Financial Reporting

AACSB: Analytic

226. On January 1, 2024, Keebler Company purchased the copyright to Bodine Computer Tutorials for \$81,000. It is estimated that the copyright will have a useful life of five years with an estimated residual value of \$6,000. The amount of amortization expense recognized for the year 2024 would be

- a) \$16,200.
- b) \$7,500.
- c) \$15,000.
- d) \$8,100.

Answer: c

Bloomcode: Application Difficulty: Medium

Learning Objective: Identify the basic accounting issues for intangible assets and goodwill.

Section Reference: Intangible Assets and Goodwill

**CPA**: Financial Reporting

AACSB: Analytic

227. Which of the following is an intangible asset that has a finite life?

- a) licence
- b) patent
- c) trademark
- d) franchise

Answer: b

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Identify the basic accounting issues for intangible assets and goodwill.

Section Reference: Intangible Assets and Goodwill

**CPA:** Financial Reporting

AACSB: Analytic

228. A franchise should be classified on the balance sheet as

- a) a current asset.
- b) a prepaid expanse.
- c) an intangible asset.
- d) property, plant, and equipment.

Answer: c

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Identify the basic accounting issues for intangible assets and goodwill.

Section Reference: Intangible Assets and Goodwill

**CPA:** Financial Reporting

AACSB: Analytic

# 229. A patent can be renewed

- a) every 20 years.
- b) only after its economic life has been exhausted.
- c) only if significantly defended in an infringement suit.
- d) A patent can never be renewed.

Answer: d

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Identify the basic accounting issues for intangible assets and goodwill.

Section Reference: Intangible Assets and Goodwill

**CPA:** Financial Reporting

AACSB: Analytic

#### 230. Development costs

- a) are always expensed when incurred.
- b) cannot be recorded separately from research costs.
- c) can be capitalized if it can be shown that the costs will provide future benefits.
- d) are intangible assets that are not amortized.

Answer: c

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Identify the basic accounting issues for intangible assets and goodwill.

Section Reference: Intangible Assets and Goodwill

**CPA:** Financial Reporting

AACSB: Analytic

## 231. An intangible asset should

- a) be expensed immediately if it has a finite life.
- b) not be amortized if it has an indefinite life.
- c) be grouped together with property plant, and equipment for reporting purposes.
- d) be amortized over its useful life or legal life, whichever is longer.

Answer: b

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Identify the basic accounting issues for intangible assets and goodwill.

Section Reference: Intangible Assets and Goodwill

**CPA:** Financial Reporting

AACSB: Analytic

232. Copyrights are granted by the federal government

- a) for the life of the creator or 50 years, whichever is longer.
- b) for the life of the creator plus 50 years.
- c) for the life of the creator or 50 years, whichever is shorter.
- d) and therefore cannot be amortized.

Answer: b

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Identify the basic accounting issues for intangible assets and goodwill.

Section Reference: Intangible Assets and Goodwill

**CPA**: Financial Reporting

AACSB: Analytic

233. In recording the acquisition cost of an entire business,

- a) goodwill is recorded as the excess of cost over the fair value of net identifiable assets.
- b) assets are recorded at the seller's carrying amounts.
- c) goodwill, if it exists, is never recorded.
- d) goodwill is recorded as the excess of cost over the carrying amount of net identifiable assets.

Answer: a

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Identify the basic accounting issues for intangible assets and goodwill.

Section Reference: Intangible Assets and Goodwill

**CPA**: Financial Reporting

AACSB: Analytic

### 234. Research costs

- a) are classified as intangible assets.
- b) must be expensed when incurred under both IFRS and ASPE.
- c) should be included in the cost of the patent they relate to.
- d) are capitalized and then depreciated over a period not to exceed 40 years.

Answer: b

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Identify the basic accounting issues for intangible assets and goodwill.

Section Reference: Intangible Assets and Goodwill

**CPA**: Financial Reporting

AACSB: Analytic

#### 235. Goodwill

- a) may be expensed upon purchase if desired.
- b) can be sold by itself to another company.
- c) can be purchased and charged directly to owner's equity.
- d) should be recorded as an asset and carried on the balance sheet unless an impairment in value occurs.

Answer: d

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Identify the basic accounting issues for intangible assets and goodwill.

Section Reference: Intangible Assets and Goodwill

**CPA:** Financial Reporting

AACSB: Analytic

236. Which of the following is NOT an intangible asset that is reported on the balance sheet?

- a) patent
- b) internally developed trademarks
- c) licence
- d) copyrights

Answer: b

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Identify the basic accounting issues for intangible assets and goodwill.

Section Reference: Intangible Assets and Goodwill

**CPA**: Financial Reporting

AACSB: Analytic

237. For an intangible asset with a finite life, the cost less residual value should be allocated over the

- a) estimated useful life.
- b) legal life.
- c) shorter of the estimated useful life and legal life.
- d) higher of the estimated useful life and legal life.

Answer: c

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Identify the basic accounting issues for intangible assets and goodwill.

Section Reference: Intangible Assets and Goodwill

**CPA:** Financial Reporting

AACSB: Analytic

238. Which of the following statements is most accurate with respect to goodwill?

- a) Goodwill is subject to annual amortization.
- b) Goodwill is subject to annual amortization and impairment testing.
- c) Goodwill is not amortized but is tested annually for impairment.
- d) Goodwill is not amortized or tested for impairment.

Answer: c

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Identify the basic accounting issues for intangible assets and goodwill.

Section Reference: Intangible Assets and Goodwill

**CPA:** Financial Reporting

AACSB: Analytic

239. Inventions 'R' Us purchased a patent for \$30,000 cash on August 1, 2024. The patent has a legal life of 20 years and is expected to have a useful life of five years. One year later, the company spends an additional \$5,000 cash to successfully defend an infringement suit in court. The company's year end is July 31. Which of the following is the correct journal entry to record the purchase of the patent on August 1, 2024?

a) Cash	
Patents	5,000
b) Patents	•
Cash	0.000
c) Patents	,
Cash	5.000
d) Cash	,
Patents	0,000

Answer: b

Bloomcode: Application Difficulty: Medium

Learning Objective: Identify the basic accounting issues for intangible assets and goodwill.

Section Reference: Intangible Assets and Goodwill

**CPA**: Financial Reporting

AACSB: Analytic

240. Inventions 'R' Us purchased a patent for \$30,000 cash on August 1, 2024. The patent has a legal life of 20 years and is expected to have a useful life of five years. One year later, the company spends an additional \$5,000 cash to successfully defend an infringement suit in court. The company's year end is July 31. Which of the following is the correct journal entry to record the year-end amortization at July 31, 2025?

, , ,		
a) Accumulated Amortization–Patents	6,000	
Accumulated Depreciation-Patents		6,000
b) Amortization Expense	1,500	
Accumulated Amortization-Patents		1,500
c) Accumulated Amortization-Patents	1,500	
Amortization Expense		1,500
d) Amortization Expense	6,000	
Accumulated Amortization-Patents		6,000

Answer: d

Bloomcode: Application Difficulty: Medium

Learning Objective: Identify the basic accounting issues for intangible assets and goodwill.

Section Reference: Intangible Assets and Goodwill

**CPA**: Financial Reporting

AACSB: Analytic

241. Inventions 'R' Us purchased a patent for \$30,000 cash on August 1, 2024. The patent has a legal life of 20 years and is expected to have a useful life of five years. One year later, the company spends an additional \$5,000 cash to successfully defend an infringement suit in court. The company's year end is July 31. Which of the following is the correct journal entry to record the legal costs incurred on August 1, 2025?

a) Legal Expense	5,000	
Cash		5,000
b) Amortization Expense	5,000	
Cash		5,000
c) Patents	5,000	
Cash		5,000
d) Amortization Expense	5,000	
Accumulated Amortization-Patents		5,000

Answer: c

Bloomcode: Application Difficulty: Medium

Learning Objective: Identify the basic accounting issues for intangible assets and goodwill.

Section Reference: Intangible Assets and Goodwill

**CPA**: Financial Reporting

AACSB: Analytic

242. Inventions 'R' Us purchased a patent for \$30,000 cash on August 1, 2024. The patent has a legal life of 20 years and is expected to have a useful life of five years. One year later, the company spends an additional \$5,000 cash to successfully defend an infringement suit in court. The company's year end is July 31. Which of the following is the correct journal entry to record the year-end amortization at July 31, 2026?

a) Accumulated Amortization–Patents	6,000	
Amortization Expense		6,000
b) Amortization Expense	7,250	
Accumulated Amortization-Patents		7,250
c) Amortization Expense	5,800	
Accumulated Amortization-Patents		5,800
d) Amortization Expense	6,000	
Accumulated Amortization-Patents		6,000

Answer: b

Bloomcode: Application Difficulty: Medium

Learning Objective: Identify the basic accounting issues for intangible assets and goodwill.

Section Reference: Intangible Assets and Goodwill

**CPA:** Financial Reporting

AACSB: Analytic

243. Blank Canvas purchased a patent for \$42,000 cash on October 1, 2024, and management intends on using the patent starting December 1, 2024. The patent has a legal life of 20 years and is expected to have a useful life of six years. The company's year end is December 31. How much is the year-end amortization at December 31, 2024?

- a) \$7,000
- b) \$1,750
- c) \$175
- d) \$583

Answer: d

Bloomcode: Application Difficulty: Medium

Learning Objective: Identify the basic accounting issues for intangible assets and goodwill.

Section Reference: Intangible Assets and Goodwill

**CPA**: Financial Reporting

AACSB: Analytic

# 244. The following information is available for Bevel Supplies for three recent years:

	<u>2024</u>	<u>2023</u>	<u> 2022</u>
Total assets	\$429,450	\$389,550	\$335,310
Net sales	781,770	730,725	661,920
Profit	39,585	27,315	20,310

What is the asset turnover ratio for 2024?

- a) 1.82 times
- b) 0.10 times
- c) 0.09 times
- d) 1.91 times

Answer: d

Bloomcode: Application Difficulty: Medium

Learning Objective: Illustrate the reporting and analysis of long-lived assets.

Section Reference: Statement Presentation and Analysis

**CPA: Financial Reporting** 

AACSB: Analytic

# 245. The following information is available for Bevel Supplies for three recent years:

	<u>2024</u>	<u>2023</u>	<u> 2022</u>
Total assets	\$429,450	\$389,550	\$335,310
Net sales	781,770	730,725	661,920
Profit	39,585	27,315	20,310

What is the asset turnover ratio for 2023?

- a) 1.82 times
- b) 2.02 times
- c) 0.08 times
- d) 1.88 times

Answer: b

Bloomcode: Application Difficulty: Medium

Learning Objective: Illustrate the reporting and analysis of long-lived assets.

Section Reference: Statement Presentation and Analysis

**CPA:** Financial Reporting

AACSB: Analytic

# 246. The following information is available for Bevel Supplies for three recent years:

	<u>2024</u>	<u> 2023</u>	<u> 2022</u>
Total assets	\$429,450	\$389,550	\$335,310
Net sales	781,770	730,725	661,920
Profit	39,585	27,315	20,310

What is the return on assets ratio for 2024?

- a) 9.2%
- b) 5.1%
- c) 9.7%
- d) 5.4%

Answer: c

Bloomcode: Application Difficulty: Medium

Learning Objective: Illustrate the reporting and analysis of long-lived assets.

Section Reference: Statement Presentation and Analysis

**CPA**: Financial Reporting

AACSB: Analytic

247. The following information is available for Bevel Supplies for three recent years:

	<u>2024</u>	<u>2023</u>	<u> 2022</u>
Total assets	\$429,450	\$389,550	\$335,310
Net sales	781,770	730,725	661,920
Profit	39,585	27,315	20,310

What is the return on assets ratio for 2023?

- a) 7.0%
- b) 3.7%
- c) 5.3%
- d) 7.5%

Answer: d

Bloomcode: Application Difficulty: Medium

Learning Objective: Illustrate the reporting and analysis of long-lived assets.

Section Reference: Statement Presentation and Analysis

**CPA:** Financial Reporting

AACSB: Analytic

248. Fern Greenhouses reported net sales of \$1,300 million, profit of \$95 million, and average total assets of \$1,675 million in 2024. What are the company's return on assets and asset turnover?

- a) 7.3% and 0.06 times
- b) 77.6% and 5.7 times
- c) 7.5% and 1.28 times
- d) 5.7% and 0.78 times

Answer: d

Bloomcode: Application Difficulty: Medium

Learning Objective: Illustrate the reporting and analysis of long-lived assets.

Section Reference: Statement Presentation and Analysis

**CPA:** Financial Reporting

## AACSB: Analytic

- 249. A high return on assets indicates
- a) a profitable company.
- b) the amount of sales generated by each dollar invested in total assets.
- c) new assets need to be purchased.
- d) the company may be in financial difficulty.

Answer: a

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Illustrate the reporting and analysis of long-lived assets.

Section Reference: Statement Presentation and Analysis

**CPA**: Financial Reporting

AACSB: Analytic

250. For the year ended December 31, 2024, Akito Co. has net sales of \$1,000,000 and profit of \$290,000. Total assets on December 31, 2024, were \$1,750,000 and total assets at December 31, 2024, are \$1,245,000. Akito's return on assets for 2024 is

- a) 19.4%.
- b) 23.3%.
- c) 66.8%.
- d) 80.3%.

Answer: a

Bloomcode: Application Difficulty: Medium

Learning Objective: Illustrate the reporting and analysis of long-lived assets.

Section Reference: Statement Presentation and Analysis

**CPA**: Financial Reporting

AACSB: Analytic

- 251. Natural resources are generally shown on the balance sheet under
- a) Intangible Assets.
- b) Investments.
- c) Property, Plant, and Equipment.
- d) Owner's Equity.

Answer: c

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Illustrate the reporting and analysis of long-lived assets.

Section Reference: Statement Presentation and Analysis

**CPA:** Financial Reporting

AACSB: Analytic

252. Which of the following statements concerning financial statement presentation is NOT correct?

- a) Intangible assets can be listed separately on the balance sheet.
- b) The balances of major classes of assets may be disclosed in the footnotes.
- c) The balances of the accumulated depreciation of major classes of assets may be disclosed in the footnotes.
- d) The balances of all individual assets, as they appear in the subsidiary long-lived asset ledger, should be disclosed in the footnotes.

Answer: d

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Illustrate the reporting and analysis of long-lived assets.

Section Reference: Statement Presentation and Analysis

**CPA**: Financial Reporting

AACSB: Analytic

# 253. Intangible assets

- a) are not reported on the balance sheet because they are expensed.
- b) are not reported on the balance sheet because they lack physical substance.
- c) should be reported as current assets on the balance sheet.
- d) should be reported as a separate classification on the balance sheet.

Answer: d

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Illustrate the reporting and analysis of long-lived assets.

Section Reference: Statement Presentation and Analysis

**CPA**: Financial Reporting

AACSB: Analytic

254. A company has the following assets:

Buildings and equipment, less accumulated depreciation of \$2,500,000	\$12,000,000
Copyrights, less accumulated amortization of \$240,000	1,200,000
Goodwill	5,000,000

The total amount reported under property, plant, and equipment would be

- a) \$12,000,000.
- b) \$14,500,000.
- c) \$17,000,000.
- d) \$19,200,000.

Answer: a

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Illustrate the reporting and analysis of long-lived assets.

Section Reference: Statement Presentation and Analysis

**CPA:** Financial Reporting

AACSB: Analytic

255. Asset turnover is calculated as follows:

- a) net sales divided by average total assets.
- b) property, plant, and equipment divided by total assets.
- c) long-lived assets divided by total sales.
- d) net sales divided by net long-lived assets.

Answer: a

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Illustrate the reporting and analysis of long-lived assets.

Section Reference: Statement Presentation and Analysis

**CPA:** Financial Reporting

AACSB: Analytic

256. Which of the following statements is CORRECT with respect to the return on assets ratio?

- a) Return on assets is a measure of liquidity.
- b) It is calculated by dividing net sales by average total assets.
- c) It indicates the amount of net sales generated by each dollar invested in assets.
- d) A high return on assets indicates a profitable company.

Answer: d

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Illustrate the reporting and analysis of long-lived assets.

Section Reference: Statement Presentation and Analysis

**CPA**: Financial Reporting

AACSB: Analytic

# MATCHING QUESTIONS

257. M	atch	the items below by entering the appropri	ate c	ode letter in the space provided.
	A.	Long-lived assets	F.	Units-of-production method
	B.	Depreciation	G.	Diminishing-balance method
	C.	Carrying amount	Н.	Operating expenditures
	D.	Residual value	I.	Capital expenditures
	E.	Straight-line method	J.	Capital cost allowance
	1.	Small expenditures that primarily benefit	it the	current period
	2.	Long-lived resources that are used in op	erati	ons and are NOT intended for resale
	3.	Cost less accumulated depreciation		
	4.	An accelerated depreciation method use	d for	financial statement purposes
	5.	Results in an equal amount of depreciati	on ea	ach period
	6.	Expected cash value of the asset at the en	nd of	its useful life
	7.	Process of allocating the cost of a deprec	iable	e asset over its useful life
	8.	Material expenditures that increase an a or useful life	sset'	s operating efficiency, productive capacity,
	9.	An accelerated depreciation method use	d for	income tax purposes
	10.	Estimated useful life is expressed in term	ns of	expected use
258. M	atch	the items below by entering the appropri	ate c	ode letter in the space provided.
	A.	Gain on disposal	E.	Goodwill
	В.	Loss on disposal	F.	Depreciation
	C.	Trademark	G.	Intangible assets

D.	Natural resources	Н.	Research costs
 1.	Process of allocating the cost of a deprec	iable	e asset to expense over its useful life
 2.	Occurs if proceeds of disposal exceed the	e carı	rying amount
 3.	When carrying amount of asset is greate	r tha	n the proceeds received from its sale
 4.	Long-lived assets replaceable only by an	act o	of nature
 5.	Can be identified only with a business as	a wł	nole
 6.	Examples are franchises and licences		
 7.	A symbol that identifies a particular com	ıpany	or product
 8.	Must be expensed when incurred		

# ANSWERS TO MATCHING QUESTIONS

257	7.
1.	Н
2.	A
3.	C
4.	G
5.	E
6.	D
7.	В
8.	I
9.	J
10.	F
Diff Lea Sec Lea rev Sec CPA	omcode: Knowledge ficulty: Easy urning Objective: Calculate the cost of property, plant, and equipment. ution Reference: Property, Plant, and Equipment urning Objective: Apply depreciation methods to property, plant, and equipment. ution Reference: Depreciation urning Objective: Explain the factors that cause changes in periodic depreciation and calculate ised depreciation for property, plant, and equipment. ution Reference: Revising Periodic Depreciation A: Financial Reporting CSB: Analytic
258	3.
1.	F
2.	A
3.	В
4.	D
5	F

- 6. G
- 7. C
- 8. H

Bloomcode: Knowledge

Difficulty: Easy

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

Learning Objective: Demonstrate how to account for property, plant, and equipment disposals.

Section Reference: Disposal of Property, Plant, and Equipment

Learning Objective: Record natural resource transactions and calculate depletion.

Section Reference: Natural Resources

Learning Objective: Identify the basic accounting issues for intangible assets and goodwill.

Section Reference: Intangible Assets and Goodwill

**CPA**: Financial Reporting

AACSB: Analytic

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# **CHAPTER 9**

# LONG-LIVED ASSETS

# **CHAPTER STUDY OBJECTIVES**

- 1. Calculate the cost of property, plant, and equipment. The cost of property, plant, and equipment includes all costs that are necessary to acquire the asset and make it ready for its intended use. All costs that benefit future periods (that is, capital expenditures) are included in the cost of the asset. When applicable, cost also includes asset retirement costs. When multiple assets are purchased in one transaction, or when an asset has significant components, the cost is allocated to each individual asset or component using their relative fair values.
- 2. Apply depreciation methods to property, plant, and equipment. After acquisition, assets are accounted for using the cost model or the revaluation model. Depreciation is recorded and assets are carried at cost less accumulated depreciation. Depreciation is the allocation of the cost of a long-lived asset to expense over its useful life (its service life) in a rational and systematic way. Depreciation is not a process of valuation and it does not result in an accumulation of cash. There are three commonly used depreciation methods:

<u>Method</u> Straight-line	Effect on Annual <u>Depreciation</u> Constant amount	Calculation (Cost – residual value) ÷ estimated useful life (in years)
Diminishing- balance	Diminishing amount	Carrying amount at beginning of year × diminishing-balance rate
Units-of- production	Varying amount	(Cost – residual value) ÷ total estimated units-of-production × actual activity during the year

Each method results in the same amount of depreciation over the asset's useful life. Depreciation expense for income tax purposes is called capital cost allowance (CCA).

3. Explain the factors that cause changes in periodic depreciation and calculate revised depreciation for property, plant, and equipment. A revision to depreciation will be required if there are (a) capital expenditures during the asset's useful life; (b) impairments in the asset's fair value; (c) changes in the asset's fair value when using the revaluation model; and/or (d) changes in the appropriate depreciation method, estimated useful life, or residual value. An impairment loss must be recorded if the recoverable amount is less than the carrying amount. Revisions of periodic depreciation are made in present and future periods, not retroactively. The new annual depreciation is determined

by using the depreciable amount (carrying amount less the revised residual value), and the remaining useful life, at the time of the revision.

- 4. *Demonstrate how to account for property, plant, and equipment disposals.* The accounting for the disposal of a piece of property, plant, or equipment through retirement or sale is as follows:
- (a) Update any unrecorded depreciation for partial periods since depreciation was last recorded.
- (b) Calculate the carrying amount (cost accumulated depreciation).
- (c) Calculate any gain (proceeds > carrying amount) or loss (proceeds < carrying amount) on disposal.
- (d) Remove the asset and accumulated depreciation accounts at the date of disposal. Record the proceeds received and the gain or loss, if any.

An exchange of assets is recorded as the purchase of a new asset and the sale of an old asset. The new asset is recorded at the fair value of the asset given up plus any cash paid (or less any cash received). The fair value of the asset given up is compared with its carrying amount to calculate the gain or loss. If the fair value of the new asset or the asset given up cannot be determined, the new long-lived asset is recorded at the carrying amount of the old asset that was given up, plus any cash paid (or less any cash received).

- 5. Record natural resource transactions and calculate depletion. The units-of-production method of depreciation is generally used for natural resources. The depreciable amount per unit is calculated by dividing the total depreciable amount by the number of units estimated to be in the resource. The depreciable amount per unit is multiplied by the number of units that have been extracted to determine the annual depletion. The depletion and any other costs to extract the resource are recorded as inventory until the resource is sold. At that time, the costs are transferred to cost of resource sold on the income statement. Revisions to depletion will be required for capital expenditures during the asset's useful life, for impairments, and for changes in the total estimated units of the resource.
- 6. *Identify the basic accounting issues for intangible assets and goodwill.* The accounting for tangible and intangible assets is much the same. Intangible assets are reported at cost, which includes all expenditures necessary to prepare the asset for its intended use. An intangible asset with a finite life is amortized over the shorter of its useful life and legal life, usually on a straight-line basis. The extent of the annual impairment tests depends on whether IFRS or ASPE is followed and whether the intangible asset had a finite or indefinite life. Intangible assets with indefinite lives and goodwill are not amortized and are tested at least annually for impairment. Impairment losses on goodwill are never reversed under both IFRS and ASPE.
- 7. *Illustrate the reporting and analysis of long-lived assets.* It is common for property, plant, and equipment, and natural resources to be combined in financial statements under the heading "property, plant, and equipment." Intangible assets with finite and indefinite lives are sometimes combined under the heading "intangible assets" or are listed separately. Goodwill must be presented separately. Either on the balance sheet or in the notes, the cost of the major classes of long-lived assets is presented. Accumulated depreciation (if the asset is depreciable) and carrying amount must be disclosed either on the balance sheet or in the notes. The depreciation and amortization methods and rates, as well as the annual depreciation expense, must also be indicated. The company's impairment policy and any impairment losses should be described and reported.

Under IFRS, companies must include a reconciliation of the carrying amount at the beginning and end of the period for each class of long-lived assets and state whether the cost or revaluation model is used.

The asset turnover ratio (net sales  $\div$  average total assets) is one measure that is used by companies to show how efficiently they are using their assets to generate sales revenue. A second ratio, return on assets (profit  $\div$  average total assets), calculates how profitable the company is in terms of using its assets to generate profit.

# **EXERCISES**

# Exercise 1

Ed Harris Company was organized on January 1. During the first year of operations, the following expenditures and receipts were recorded in random order in the account, Land:

_		<u>Debits</u>
1.	Cost of real estate purchased as a plant site (land and building)	\$ 320,000
2.	Legal fees paid at the time of the purchase of the real estate	6,500
3.	Cost of demolishing building to make land suitable for construction	
	of a new building	12,000
4.	Architect's fees on building plans	14,000
5.	Excavation costs for new building.	24,000
6.	Cost of filling and grading the land.	5,000
7.	Insurance and taxes during construction of building.	6,000
8.	Cost of repairs to building under construction caused by a small fire	14,000
9.	Interest paid during the year, of which \$52,000 pertains to the	
	construction period	64,000
10.	Full payment to building contractor.	760,000
11.	Cost of parking lots and driveways	36,000
12.	Property taxes paid for the current year on the land	4,000
	Total Debits	<u>\$1,265,500</u>
		<u>Credits</u>
13.	Insurance proceeds for fire damage	\$10,000
14.	Proceeds from residual of demolished building.	<u>3,500</u>
	Total Credits	<u>\$13,500</u>

# Instructions

Analyze the above transactions using the columns below. Insert the number of each transaction in the item space and insert the amounts in the appropriate columns.

<u>Item</u>	<u>Land</u>	Land <u>Improvements</u>	<u>Building</u>	<u>Other</u>	Account Title
Solution 1 (1	15 min.)	Land			
<u>Item</u> 1.	<u>Land</u> \$320,000	<u>Improvements</u>	Building	<u>Other</u>	Account Title
2.	6,500				
3.	12,000				
4.			\$ 14,000		

5.			24,000		
6.	5,000				
7.			6,000		
8.				\$14,000	Fire Loss
9.			52,000	12,000	Interest Expense
10.			760,000		
11.		\$36,000			Land Improvements
12.				4,000	Property Tax Expense
13.				(10,000)	Fire Loss
14.	(3,500)				
Totals	<u>\$340,000</u>	<u>\$36,000</u>	<u>\$856,000</u>	<u>\$20,000</u>	

Bloomcode: Analysis Difficulty: Medium

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA**: Financial Reporting

AACSB: Analytic

#### Exercise 2

Rainbow Logistics purchased land with the intention of building an office. Rainbow also engaged other contractors for fencing, paving, lighting, landscaping, and to remove a dilapidated building to make room for a new office building. The following information relates to these transactions:

- 1. Purchased land for \$350,000.
- 2. Paid \$4,000 for seller's unpaid property taxes.
- 3. Paid \$22,000 to have the dilapidated building removed.
- 4. Paid a builder \$400,000 to design and build the office building.
- 5. Paid a company \$20,000 to grade and clear the land to make it suitable for building purposes.
- 6. Paid a landscaping company \$10,000 for trees and shrubs.
- 7. Paid a contractor \$16,000 for outside lighting around the parking area and sidewalks.
- 8. Paid \$26,000 to have the parking lot paved.
- 9. Paid a fence builder \$15,000 to construct a security fence around the property.

## Instructions

Determine the cost of the land, the building, and the land improvements.

Solution 2 (10 min.)

 $Land = \$350,000 + \$22,000 + \$4,000 + \$20,000 = \underline{\$396,000}$ 

Building = \$400.000

Land improvements = \$10,000 + \$16,000 + \$15,000 + \$26,000 = \$67,000

Bloomcode: Analysis Difficulty: Medium

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA**: Financial Reporting

AACSB: Analytic

#### Exercise 3

Identify the following expenditures as capital expenditures or operating expenditures:

- 1. Replacement of worn-out gears on factory machinery
- 2. Construction of a new wing on an office building
- 3. Painting the exterior of a building
- 4. Oil change on a company truck
- 5. Replacing a network server's hard drive, thereby increasing data storage capacity by ten times. No extension of useful life expected
- 6. Overhaul of a truck motor. One-year extension in useful life is expected
- 7. Purchased a wastebasket, with an expected useful life of five years, at a cost of \$10
- 8. Painting and lettering of a used truck upon acquisition of the truck

# **Solution 3** (5 min.)

- 1. operating
- 2. capital
- 3. operating
- 4. operating
- 5. capital
- 6. capital
- 7. operating
- 8. capital

Bloomcode: Comprehension

Difficulty: Easy

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA:** Financial Reporting

AACSB: Analytic

#### Exercise 4

Below are selected entries for Joanna Co.:

- 1. The \$60 cost of repairing a printer was charged to Equipment.
- 2. The \$5,000 cost of a major truck engine overhaul was debited to Repairs Expense. The overhaul is expected to increase the operating efficiency of the truck.
- 3. The \$6,000 closing costs associated with the acquisition of land were debited to Legal Fees Expense.
- 4. A \$600 charge for transportation costs on new equipment purchased was debited to Delivery Expense.
- 5. Freight cost incurred bringing a new piece of equipment to the plant site was charged to Equipment.

#### Instructions

For each entry above, make a correcting entry if necessary. If the entry given is correct, then state "No entry required."

# Solution 4 (10 min.)

1.	Repairs Expense	60	60
2.	Vehicles Repairs Expense	5,000	5,000
3.	Land Legal Fees Expense	6,000	6,000
4.	Equipment  Delivery Expense	600	600

5. No entry required.

Bloomcode: Analysis Difficulty: Medium

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA**: Financial Reporting

AACSB: Analytic

#### Exercise 5

Below are transactions for Oriel Company:

- 1. Purchased land for \$900,000.
- 2. Paid \$20,000 to demolish building located on land.
- 3. Paid \$3,000 for building permit.
- 4. Paid \$2,000 for architect fees.
- 5. Paid \$3,000 for excavation costs.
- 6. Paid interest of \$22,000 during construction of new building.

- 7. Paid \$960,000 to complete the building.
- 8. Paid \$30,000 to pave the parking lot.
- 9. Paid \$4,000 for underground sprinkler.
- 10. Ordered new equipment, paid \$30,000.
- 11. Paid \$1,500 to install and test new equipment.
- 12. Paid \$250 to insure equipment for one year.
- 13. Paid \$2,500 to paint office walls in the new building.
- 14. Paid \$2,000 to repair equipment.
- 15. Purchased a truck for \$25,000.
- 16. Paid \$250 for truck licence.
- 17. Paid \$60 for oil change on new truck.
- 18. Paid \$15,000 for fences around the new building.
- 19. Purchased two cash registers for \$1,100 each.
- 20. Paid \$2,200 for annual yard maintenance.

# Instructions

- a) Determine if each item should be capitalized (C) or expensed (E).
- b) Determine the balance in the Land account and the Building account.

# Solution 5

- a)
- 1. C
- 2. C
- 3. C
- 4. C
- 5. C
- 6. C
- 7. C
- 8. C
- 9. C
- 10. C
- 11. C
- 12. E
- 13. E
- 14. E

- 15. C
- 16. E
- 17. E
- 18. C
- 19. C
- 20. E
- b) Land Account = \$900,000 + \$20,000 = \$920,000

Building Account = \$3,000 + \$2,000 + \$3,000 + \$22,000 + \$960,000 = \$990,000

Bloomcode: Analysis Difficulty: Medium

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA:** Financial Reporting

AACSB: Analytic

## Exercise 6

Extra Company purchased land for \$115,000 with the intention of constructing a new operating facility. The land purchase included a dilapidated building that was removed at a cost of \$16,000. The only salvage value from this old building was some materials, that were sold for proceeds of \$4,000. Extra had paid surveying costs of \$1,800 and legal fees related to land transfer of \$6,700. The new building was quickly constructed at a total cost of \$422,000. Architectural drawings and permits on the construction of this new facility totalled \$18,000 and \$10,650, respectively. Insurance premiums of \$9,200 are paid annually. The production manager is currently on-site facilitating the production start-up. This manager has an annual salary of \$85,000.

#### Instructions

- a) Calculate the acquisition cost of the land. Identify each element of cost clearly.
- b) Calculate the acquisition cost of the new building. Identify each element of cost clearly.

#### Solution 6 (10 min.)

a)	Purchase price	\$115,000
- /	Demolition costs	16,000
	Proceeds from salvaged materials	(4,000)
	Surveying costs	1,800
	Legal fees for land transfer	6,700
	Acquisition cost of land	\$135,500
b)	Construction costs	\$422,000
	Architectural drawings	18,000

Building permits	<u> 10,650</u>
Acquisition cost of building	\$450,650

Bloomcode: Application Difficulty: Medium

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA**: Financial Reporting

AACSB: Analytic

# Exercise 7

On August 1, 2024, Mark Leamington Engineering paid \$1,000,000 in a lump-sum purchase of land, building, and equipment. The payment consisted of \$200,000 cash and a note payable for the balance. An appraisal revealed the following fair values at the time of the purchase:

 Land
 \$500,000

 Building
 450,000

 Equipment
 250,000

#### Instructions

Prepare the necessary journal entry to record this lump-sum purchase (round all percentage calculations to two decimal places).

# Solution 7 (10 min.)

Asset	Fair Value	Total Fair Value	% of Fair Value	Cost	Allocated Cost
Land	\$ 500,000	\$1,200,000	41.67%	\$1,000,000	\$ 416,700
Building	450,000	1,200,000	37.50%	1,000,000	375,000
Equipment	250,000	1,200,000	20.83%	1,000,000	208,300
Total	\$1,200,000				\$1,000,000

Aug. 1, 2024	Land	416,700	
_	Building	375,000	
	Equipment	208,300	
	Cash		200,000
	Notes Payable		800,000

Bloomcode: Application Difficulty: Medium

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

**CPA:** Financial Reporting

AACSB: Analytic

#### Exercise 8

Shen Athletics purchased factory equipment with an invoice price of \$92,000. Other costs incurred were freight costs, \$2,500; installation of wiring and foundation, \$2,200; material and labour costs in testing equipment, \$700; oil lubricants and supplies to be used with equipment, \$500; one-year

fire insurance policy covering equipment, \$1,400. The equipment is estimated to have an \$8,000 residual value at the end of its five-year useful service life.

#### Instructions

- a) Calculate the acquisition cost of the equipment. Identify each element of cost clearly.
- b) If the double diminishing-balance method of depreciation was used, the constant percentage applied to a diminishing carrying amount would be \_\_\_\_\_.

# **Solution 8** (10 min.)

a)	Invoice cost	\$92,000
	Freight costs	2,500
	Installation of wiring and foundation	2,200
	Material and labour costs in testing	700
	Acquisition cost	<u>\$97,400</u>

b) If the diminishing-balance method of depreciation was used, the constant percentage applied to a diminishing carrying amount would be 40% ( $100\% \div 5$  years) x 2.

Bloomcode: Application Difficulty: Medium

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA:** Financial Reporting

AACSB: Analytic

#### Exercise 9

Dufferin Company uses the straight-line method of depreciation. The company's fiscal year end is December 31. The following transactions and events occurred during the first three years.

- 2023 July 1 Purchased a new computer system from The Computer Centre for \$37,000 cash and shipping costs of \$250.
  - Nov. 3 Incurred ordinary repairs on computer of \$3,280.
  - Dec. 31 Recorded 2023 depreciation on the basis of an estimated five-year life and residual value of \$1,250.
- 2024 Dec. 31 Recorded 2024 depreciation.
- <u>2025</u> Jan. 1 Paid \$9,800 for a major upgrade of the computer. This expenditure is expected to increase the operating efficiency and capacity of the computer.

# Instructions

Prepare the necessary entries. (Show calculations.)

#### **Solution 9** (15 min.)

<u>2023</u>	July	1	Equipment	37,250	
			Cash		37.250

	Nov. 3	Repairs Expense  Cash	3,280	3,280
	Dec. 31	Depreciation Expense	3,600	3,600
2024	Dec. 31	Depreciation Expense	7,200	7,200
<u>2025</u>	Jan. 1	Equipment	9,800	9,800

Bloomcode: Application Difficulty: Medium

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA:** Financial Reporting

AACSB: Analytic

#### Exercise 10

On March 31, 2024, Holland Industries purchased assets for \$2,500,000 cash. Before completing the purchase, Holland had an appraisal completed to determine the relative value of each of the assets included in the purchase price.

The appraisal indicated that the fair value of the land, if purchased separately, would be \$375,000, the building's value is \$1,900,000, the manufacturing equipment \$192,500, and the office equipment \$55,000. In addition to the land, building and equipment, the purchase price includes inventory with a net realizable value of \$27,500.

The anticipated life of the building is 25 years, the manufacturing equipment 10 years, and the office equipment five years, with no residual value for any of them. Holland has a December 31 year end.

## **Instructions**

- a) Record the purchase on March 31, 2024 (round percentages to one decimal place)
- b) Record the depreciation expense for 2024 using the straight-line method assuming the company chooses to prorate depreciation based on the number of months the asset has been in use.

#### **Solution 10** (20 min.)

a) Allocation of cost based on fair values:

	Fair value	Percentage	Allocation of cost
Land	\$ 375,000	14.7%	\$ 367,500

Building	1,900,000	74.5%	1,862,500
Manufacturing equipment	192,500	7.5%	187,500
Office equipment	55,000	2.2%	55,000
Inventory	27,500	1.1%	<u>27,500</u>
	\$2,550,000	100.0%	\$2,500,000

# Entry to record purchase

ши	ry to record purchase		
	Land	367,500	
	Building	1,862,500	
	Equipment	187,500	
	Equipment (office)	55,000	
	Merchandise Inventory	27,500	
	Cash	·	2,500,000
b)			
	Depreciation Expense	78,188	
	Accumulated Depreciation-Building		55,875
	$(\$1,862,500 \div 25) \times 9/12$		
	Accumulated Depreciation-Equipment		14,063
	$(\$187,500 \div 10) \times 9/12)$		
	Accumulated Depreciation-Equipment (office)		8,250
	$(\$55,000 \div 5) \times 9/12)$		

Bloomcode: Application Difficulty: Medium

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA**: Financial Reporting

AACSB: Analytic

#### Exercise 11

On May 5, 2024, Vermilion River Adventures purchased a property for \$400,000 cash. The property included the following long-lived assets:

	<u>Appraised Value</u>
Land	. \$120,000
Building	. 200,000
Equipment	
Paved area	. 20,000
Outdoor lighting	. 10,000
	<u>\$450,000</u>

# Instructions

- a) Give the journal entry to allocate the purchase price between the above assets. Round all amounts to the nearest dollar, if necessary.
- b) Prepare a compound journal entry to record depreciation of the long-lived assets on December

# 31, 2024, assuming the following additional details:

	<u>Useful Life in Years</u>	<u>Residual Value</u>
Building	30	\$20,000
Equipment	5	10,000
Paved area	4	-0-
Outdoor lighting	10	-0-

Prorate depreciation based on the number of months the asset has been in use.

# **Solution 11** (20 min.)

a)					Allocation of	
			% of Appraised Value	<u>P</u> 1	<u>urchase Price</u>	
	Land		$$120,000 \div $450,000 \times $400,000$	=	\$106,667	
	Building		$200,000 \div 450,000 \times 400,000$	=	177,778	
	Equipme	ent	$$100,000 \div $450,000 \times $400,000$	=	88,889	
	Paved ar		$$20,000 \div $450,000 \times $400,000$	=	17,778	
	Outdoor	lighting	$$10,000 \div $450,000 \times $400,000$	=	8,888	
		0 0			\$400,000	
					<u> </u>	
	May 5	Land			106,667	
	J				177,778	
	Equipment				88,889	
	Leasehold Improvement				17,778	
	Leasehold Improvement (lighting)				8,888	
		-	(-86)		5,555	400,000
		<b>G</b>				100,000
b)	Deprecia	ition Expense			17,581	
٥	Depreciation ExpenseAccumulated Depreciation–Building				1.,551	3,506
	$[(\$177,778 - \$20,000) \div 30] \times 8/12$					3,3 3 3
	Accumulated Depreciation–Equipment					10,519
	$[(\$ 88,889 - \$10,000) \div 5] \times 8/12$				10,017	
	Accı	L V	ition–Leasehold Improvements			2,963
	71000	[(\$17,778 - \$0)	<u>-</u>			2,703
	Accı		ition–Leasehold Improvements (Ligh	ting		593
	ACCI	÷ (81 – \$8,888)]	1 \ 0	ung)		373
		[(40,000 - 40) -	10] \ 0/12			

Bloomcode: Application Difficulty: Medium

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA**: Financial Reporting

AACSB: Analytic

# Exercise 12

Independent Energy depreciates its property, plant, and equipment assets using the straight-line method. The company's fiscal year end is December 31. The following selected transactions and events occurred during the first three years:

2023 Jan. 1 Purchased equipment from Equipment World for \$214,500 on account.

- Independent Energy also incurred freight and installation costs of \$1,500 and \$4,000, respectively.
- Sept. 30 Paid for annual insurance of \$4,200 and routine maintenance of \$1,700 for the machine. The insurance policy expires on September 30, 2024.
- Dec. 31 Recorded 2023 depreciation on the basis of an estimated 10-year useful life and residual value of \$20,000.
- 2024 Dec. 31 Recorded 2024 depreciation and impairment loss (if any). Independent Energy conducted an impairment assessment as indicators suggested that an impairment may be possible. It was determined that the recoverable amount of the equipment is currently \$160,000. The estimated residual value remained unchanged.
- 2025 Dec. 31 Independent Energy sold the equipment to Engaged Auto Company for proceeds of \$140,000.

#### Instructions

Prepare the necessary entries. (Show calculations.)

Solution 12 (30 min.)         2023       Jan. 1       Equipment								
		Accounts Payable(\$214,500 + \$1,500 + \$4,000)		220,000				
	Sept. 30	Repairs Expense Prepaid Insurance Cash	1,700 4,200	5,900				
	Dec. 31	Depreciation ExpenseAccumulated Depreciation–Equipment[(\$220,000 – \$20,000) ÷ 10]	20,000	20,000				
2024	Dec. 31	Depreciation ExpenseAccumulated Depreciation–Equipment[(\$220,000 – \$20,000) ÷ 10]	20,000	20,000				
	Dec. 31	Impairment Loss	20,000	20,000				
<u>2025</u>	Dec. 31	Depreciation Expense	17,500	17,500				
	Dec. 31	Cash  Accumulated Depreciation–Equipment  Loss on Disposal  Equipment  Accumulated depreciation = \$20,000 + \$20,000 + \$20,000	140,000 77,500 2,500 000 + \$17,50	220,000 0 = \$77,500				

Carrying amount = \$220,000 - \$77,500 = \$142,500Gain (loss) on disposal = \$140,000 - \$142,500 = \$(2,500)

Bloomcode: Analysis Difficulty: Medium

Learning Objective: Calculate the cost of property, plant, and equipment.

Section Reference: Property, Plant, and Equipment

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

Learning Objective: Explain the factors that cause changes in periodic depreciation and calculate

revised depreciation for property, plant, and equipment. Section Reference: Revising Periodic Depreciation

Learning Objective: Demonstrate how to account for property, plant, and equipment disposals.

Section Reference: Disposal of Property, Plant, and Equipment

**CPA:** Financial Reporting

AACSB: Analytic

## Exercise 13

Das Gym purchased new equipment for \$175,000. It is estimated that the equipment will have a \$15,000 residual value at the end of its five-year useful service life. The double diminishing-balance method of depreciation will be used.

#### Instructions

Prepare a depreciation schedule that shows the annual depreciation expense on the equipment for its five-year life. Round all amounts to the nearest dollar.

#### **Solution 13** (10 min.)

Double diminishing-balance rate =  $(100\% \div 5) \times 2 = 40\%$ 

Carrying amount					Annual	End of Year			
	Beginning	Depreciation			Depreciation	Accumulated	Carrying amou		
<u>Year</u>	of Year	×	Rate	=	Expense	<b>Depreciation</b>		<b>End of Year</b>	
1	\$175,000	×	40%		\$70,000	\$ 70,000		\$105,000	
2	105,000	×	40%		42,000	112,000		63,000	
3	63,000	×	40%		25,200	137,200		37,800	
4	37,800	×	40%		15,120	152,320		22,680	
5	22,680	×	40%		7,680*	160,000		15,000	

<sup>\*</sup>Adjusted to \$7,680 because ending carrying amount should not be less than the expected residual value of \$15,000.

Bloomcode: Application Difficulty: Medium

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA**: Financial Reporting

AACSB: Analytic

# Exercise 14

Randy Automotive purchased equipment on October 1, 2024, at a total cost of \$ 150,000. The machine has an estimated useful life of eight years or 100,000 hours, and an estimated residual value of \$10,000. During 2024 and 2025, the machinery was used 4,400 and 12,800 hours, respectively.

# Instructions

Calculate depreciation expense at December 31, 2024 and December 31, 2025, under the following depreciation methods (round all amounts to the nearest dollar):

	<u> 2024</u>	<u> 2025</u>
Straight-line depreciation		
Units-of-production depreciation		
Double diminishing-balance depreciation		

# **Solution 14** (15 min.)

	<u>2024</u>	<u>2025</u>
Straight-line depreciation	\$4,375	\$17,500
Units-of-production depreciation	\$6,160	\$17,920
Double diminishing-balance depreciation	\$9,375	\$35,156

(1) Straight-line depreciation

```
December 31, 2024 = (\$150,000 - \$10,000)/8 \times 3/12 = \$4,375
December 31, 2025 = (\$150,000 - \$10,000)/8 = \$17,500
```

(2) Units-of-production depreciation

```
December 31, 2024 = (\$150,000 - \$10,000)/100,000 = \$1.40 \times 4,400 = \$6,160
December 31, 2025 = (\$150,000 - \$10,000)/100,000 = \$1.40 \times 12,800 = \$17,920
```

(3) Double diminishing-balance depreciation

```
Double diminishing rate = 200\%/8 years = 25\%
December 31, 2024 = $150,000 \times 25\% \times 3/12 = $9,375
December 31, 2025 = ($150,000 - $9,375) \times 25\% = $35,156
```

Bloomcode: Application Difficulty: Medium

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation CPA: Financial Reporting

AACSB: Analytic

#### Exercise 15

Equipment acquired on October 1, 2024, at a cost of \$540,000 has an estimated useful life of 10 years. The residual value is estimated to be \$55,000 at the end of the equipment's useful life. The company has a December 31 year end.

# Instructions

Calculate the depreciation expense for December 31, 2024 and 2025, using:

- a) the straight-line method.
- b) the double diminishing-balance method.

## **Solution 15** (10 min.)

a) Straight-line method

2024 
$$\frac{\$540,000 - \$55,000}{10 \text{ years}} \times 3/12 = \frac{\$12,125}{10}$$

$$2025 \qquad (\$540,000 - \$55,000)/10 = \underline{\$48,500}$$

b) Double diminishing-balance method

Depreciation rate =  $200\% \div 10$  years = 20%

$$2024$$
  $$540,000 \times 20\% \times 3/12 = $27,000$ 

2025 
$$(\$540,000 - \$27,000) \times 20\% = \$102,600$$

Bloomcode: Application Difficulty: Medium

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

CPA: Financial Reporting

AACSB: Analytic

# Exercise 16

On October 1, 2024, Stan Auto Rentals purchases a new automobile for \$30,000 to add to its fleet of rental cars. The automobiles are rented out on a short-term basis with rental fees calculated based on distance driven by the customer. Stan's policy is to sell and replace a car after the earlier of three years, or 75,000 kilometres. The average selling price of the used cars is \$8,000. This particular car was driven 8,000 km in 2024, 39,000 km in 2025, and 21,000 km in 2026.

#### Instructions

- a) Calculate 2024 and 2025 depreciation expense under each of the following methods (round all amounts to the nearest dollar):
  - (i) Straight-line
  - (ii) Diminishing-balance using a 40% rate
  - (iii) Units-of-production
- b) Which method will best match the estimated pattern in which the asset's economic benefits are expected to be consumed? Explain.

#### **Solution 16** (10 min.)

a)

a <i>)</i>	
<u>2024</u>	<u>2025</u>
(i) $(\$30,000 - \$8,000) \div 3 \times 3/12 = \$1,833$	$(\$30,000 - \$8,000) \div 3 = \$7,333$
(ii) $(\$30,000 \times 40\%) \times 3/12 = \$3,000$	$(\$30,000 - \$3,000) \times 40\% = \$10,800$
(iii) $(\$30,000 - \$8,000) \div 75,000 \text{ km x } 8,000 \text{ km}$	$(\$30,000 - \$8,000) \div 75,000 \text{ km x } 39,000 \text{ km}$
= \$2.347	= \$11.440

b) Because revenue is based on units-of-production (kilometres driven), the method that will best match the estimated pattern in which the asset's economic benefits are expected to be

consumed is units-of-production.

Bloomcode: Application Difficulty: Medium

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA: Financial Reporting** 

AACSB: Analytic

#### Exercise 17

Sangria Boat Lifts purchased equipment on January 1, 2024, for \$96,000. It is estimated that the equipment will have a \$5,000 residual value at the end of its eight-year useful life. It is also estimated that the equipment will produce 100,000 units over its eight-year life.

#### Instructions

Answer the following independent questions.

- a) Calculate the amount of depreciation expense for the year ended December 31, 2024, using the straight-line method of depreciation.
- b) If 16,000 units of product are produced in 2024 and 36,000 units are produced in 2025, what is the carrying amount of the equipment at December 31, 2025, using the units-of-production depreciation method?
- c) If the company uses the double diminishing-balance method of depreciation, what will be the balance of the Accumulated Depreciation–Equipment account at December 31, 2026?

# **Solution 17** (15 min.)

a) Straight-line method:  $\frac{\$96,000 - \$5,000}{\$} = \$11,375 \text{ per year}$ 

b) <u>Units-of-production method:</u> \$96,000 - \$5,000 = \$0.91 per unit100,000 units

2024 16,000 units  $\times$  \$0.91 = \$14,560 2025 36,000 units  $\times$  \$0.91 =  $\underline{32,760}$ Accumulated depreciation = \$47,320

# c) <u>Double diminishing-balance method: (200%/8)</u>

	Carrying amount		Diminishing-	-	Depreciation Accumulated		
	<b>Beginning of Year</b>	×	<b>Balance Rate</b>	=	<u>Expense</u>	<u>Depreciation</u>	
2024	\$96,000		25%		\$24,000	\$24,000	
2025	72,000		25%		18,000	42,000	
2026	54,000		25%		13,500	55,500	

Bloomcode: Application Difficulty: Medium

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA**: Financial Reporting

AACSB: Analytic

#### Exercise 18

The Picnic Basket, a popular pizza restaurant, has a thriving delivery business. The Picnic Basket has a fleet of three delivery automobiles. Information related to the fleet is as follows:

				Accumulated	Kilometres
			<b>Estimated Life</b>	Depreciation	Operated
<u>Car</u>	Cost	<u>Residual Value</u>	in Kilometres	Beg. of the Year	During Year
1	\$18,000	\$3,000	50,000	\$2,100	20,000
2	15,000	2,400	60,000	1,890	22,000
3	20,000	2,500	70,000	2,000	19,000

## Instructions

Using the units-of-production method:

- a) Determine the depreciation rates per kilometre for each car.
- b) Determine the depreciation expense for each car for the current year.
- c) Make one compound journal entry to record the annual depreciation expense for the fleet.

# **Solution 18** (10 min.)

a) Car 1 
$$\frac{$18,000 - $3,000}{50,000} = $0.30$$
 per km.

Car 2 
$$\frac{$15,000 - $2,400}{60,000 \text{ km}} = $0.21 \text{ per km}.$$

Car 3 
$$\frac{$20,000 - $2,500}{70,000 \text{ km}} = $0.25 \text{ per km}.$$

c)	Depreciation Expense	15,370	
	Accumulated Depreciation-Vehicles (Car 1)		6,000
	Accumulated Depreciation-Vehicles (Car 2)		4,620
	Accumulated Depreciation-Vehicles (Car 3)		4,750

Bloomcode: Application Difficulty: Medium

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA**: Financial Reporting

AACSB: Analytic

# Exercise 19

The Northwood Clinic purchased a new surgical laser for \$75,000. The estimated residual value is \$7,500. The laser has a useful life of four years and the clinic expects to use it 10,000 hours. It was used 1,600 hours in Year 1; 2,100 hours in Year 2; 3,400 hours in Year 3; 2,900 hours in Year 4.

#### Instructions

- a) Calculate the annual depreciation for each of the four years under each of the following methods:
  - i) straight-line
  - ii) units-of-production
- b) If you were the administrator of the clinic, which method would you deem as most appropriate? Justify your answer.
- c) Which method would result in the lowest reported profit in the first year? Which method would result in the lowest total reported profit over the four-year period?
- d) Which method would result in the lowest cash flow in Year 1? Over the life of the asset?

# **Solution 19** (10 min.)

a)

- i) Straight-line method: \$75,000 \$7,500 = \$16,875 per year 4 years
- ii) <u>Units-of-production method</u>: \$75,000 \$7,500 = \$6.75 per hour 10,000 hours

Year 1 
$$1,600 \times \$6.75 = \$10,800$$
  
2  $2,100 \times \$6.75 = \$14,175$   
3  $3,400 \times \$6.75 = \$22,950$   
4  $2,900 \times \$6.75 = \$19,575$ 

	Straight-line	<b>Units-of-Production</b>
Year 1	\$16,875	\$10,800
Year 2	16,875	14,175
Year 3	16,875	22,950
Year 4	<u> 16,875</u>	<u> 19,575</u>
Total	<u>\$67,500</u>	<u>\$67,500</u>

- b) The units-of-production method can be justified based on the variable usage the laser will receive during its useful life.
- c) The straight-line method provides the highest depreciation expense for the first year, and therefore the lowest first year profit. Over the four-year period, both methods result in the same total depreciation expense (\$67,500) and, therefore, the same total profit.
- d) Both methods will result in the same cash flow in Year 1 and over the life of the asset. Recording depreciation expense does not affect cash flow. There is no Cash account involved in the entry to record depreciation (Dr. Depreciation Expense; Cr. Accumulated Depreciation). It is only an allocation of the capital cost to expense over an asset's useful life.

Bloomcode: Analysis Difficulty: Medium

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA: Financial Reporting** 

AACSB: Analytic

#### Exercise 20

Gordon's Garage purchased a specialized machine on April 1, 2024, for a total cost of \$254,000 from Scissor Manufacturers. This machine is expected to become outdated and be replaced in 16 years at which time it will have a residual value of \$25,000.

#### Instructions

- a) What amount would be reported as depreciation expense for this machine on Gordon's income statement for December 31, 2024 and December 31, 2025, under the following depreciation methods? (rounded to two decimals)
  - i) Straight-line method
  - ii) Double diminishing-balance method
- b) What is the machine's carrying amount at December 31, 2025, under both depreciation methods discussed in part a)?

# **Solution 20** (15 min.)

a)

i) Straight-line method

Annual Depreciation = \$254,000 - \$25,000/16 years = \$14,312.50

2024:  $$14,312.50 \times 9/12 \text{ months} = $10,734.38$ 

2025: \$14,312.50

ii) <u>Double diminishing-balance method</u> Double Diminishing Rate = 200%/16 = 12.5%

	Carrying amount	t Depreciation	Annual	Accumulated	Carrying
<u>Year</u>	<b>Beginning Year</b>	× Rate =	<b>Depreciation</b>	<b>Depreciation</b>	<u>amount</u>
2024	\$254,000.00	$12.5\% \times 9/12$	\$23,812.50	\$23,812.50	\$230,187.50
2025	230,187.50	12.5%	28,773.44	52,585.94	201,414.06

b) Carrying amount, December 31, 2025:

Straight-line = \$254,000.00 - \$10,734.38 - \$14,312.50 = \$228,953.12Double diminishing-balance = \$201,414.06

Bloomcode: Application Difficulty: Medium

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

**CPA**: Financial Reporting

AACSB: Analytic

#### Exercise 21

Prairie Airlines purchased a 747 aircraft on January 1, 2023, at a cost of \$30,000,000. The estimated useful life of the aircraft is 20 years, with an estimated residual value of \$4,000,000. On December 31, 2025, before recording 2025 depreciation, the airline revises the total estimated useful life to 15 years with a revised residual value of \$3,000,000.

#### Instructions

- a) Calculate the depreciation and carrying amount at December 31, 2024, using the straight-line method and the double diminishing-balance method.
- b) Assuming the straight-line method is used, calculate the depreciation expense for the year ended December 31, 2025.

# **Solution 21** (20 min.)

a) Straight-line method

	Depreciable		Depreciation	on	Annual	Ac	cumulated	Carrying
<u>Year</u>	Cost	×	Rate	=	<b>Depreciation</b>	<u>De</u>	preciation	<u>amount</u>
2023	\$26,000,000		5%		\$1,300,000	\$	1,300,000	\$28,700,000
2024	26,000,000		5%		1,300,000		2,600,000	27,400,000

# Double diminishing-balance method

<u>Year</u> 2023 2024	Carrying amount <u>Beginning Year</u> \$30,000,000 27,000,000	Depreciation  × Rate 10% 10%	=	Annual <a href="#">Depreciation</a> \$3,000,000 2,700,000	Accumula <u>Depreciat</u> \$3,000,0 5,700,0	<u>ion</u> 100	Carrying <u>amount</u> \$27,000,000 24,300,000
Le	arrying amount, De ess: Revised residua epreciable cost	\$27,400,0 <u>3,000,0</u> \$24,400,0	000				
Remaining useful life (15 years – 2 years) <u>13 yrs.</u>							
Re	evised annual depr	<u>\$1,876,9</u>	23				

Bloomcode: Application Difficulty: Medium

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

Learning Objective: Explain the factors that cause changes in periodic depreciation and calculate

revised depreciation for property, plant, and equipment. Section Reference: Revising Periodic Depreciation

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#### Exercise 22

Winningham Company sold the following two machines in 2024:

	Machine A	<u>Machine B</u>
Cost	\$92,000	\$43,000
Purchase date	July 1, 2020	Jan. 1, 2020
Useful life	8 years	8 years
Residual value	\$4,000	\$3,000
Depreciation method	Straight-line	Double diminishing-balance
Date sold	July 1, 2024	Aug. 1, 2024
Sales price	\$37,000	\$12,000

# Instructions

Journalize all entries required to update depreciation and record the sales of the two assets in 2024. The company has recorded depreciation on the machine to December 31, 2023.

Solution 22 July 1	2 (20 min.)  Depreciation Expense  Accumulated Depreciation–Equipme ( $$92,000 - $4,000$ ) $\div 8 \times 6/12 = $5$	ent	5,500	5,500
	CashAccumulated Depreciation–Equipment A* Loss on DisposalEquipment A		37,000 44,000 11,000	92,000
*2020 2021 2022 2023 2024 Total accur	$(\$92,000 - \$4,000) \div 8 \times 6/12$ $(\$92,000 - \$4,000) \div 8$ $(\$92,000 - \$4,000) \div 8 \times 6/12$ mulated depreciation at date of disposal	\$ 5,500 11,000 11,000 11,000 		
Aug. 1	Depreciation ExpenseAccumulated Depreciation–Equipme $(\$43,000 - \$29,395) \times 25\% \times 7/12$	ent B	1,984	1,984
	CashAccumulated Depreciation–Equipment B** Gain on DisposalEquipment	*	12,000 31,379	379 43,000
**2020 2021 2022 2023 2024 Total accur	$$43,000 \times 25\%$ $(\$43,000 - \$10,750) \times 25\%$ $(\$43,000 - \$18,813) \times 25\%$ $(\$43,000 - \$24,860) \times 25\%$ $(\$43,000 - \$29,395) \times 25\% \times 7/12$ mulated depreciation at date of disposal	\$10,750 8,063 6,047 4,535 1,984 \$31,379		

Bloomcode: Application Difficulty: Medium

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

Learning Objective: Demonstrate how to account for property, plant, and equipment disposals.

Section Reference: Disposal of Property, Plant, and Equipment

**CPA:** Financial Reporting

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#### Exercise 23

Paper Products Inc. sold two pieces of machinery equipment in 2024. The following information pertains to the two machines:

		Purchase	Useful	Residual	Depreciation		Sales
<u>Machine</u>	Cost	<u>Date</u>	<u>Life</u>	<u>Value</u>	Method	Date Sold	<u>Price</u>
#1	\$86,000	7/1/20	5 yrs.	\$6,000	Straight-line	7/1/24	\$20,000
#2	\$50,000	7/1/23	5 yrs.	\$5,000	Double diminishing-	12/31/24	\$32,000
					balance		

#### Instructions

- a) Calculate the accumulated depreciation on each machine at the date of disposal.
- b) Prepare the journal entries in 2024 to record 2024 depreciation and the sale of each machine.

# **Solution 23** (20 min.)

# a) Machine #1

					Annual	Accumulated
<u>Year</u>	Depreciable Cost	×	<b>Depreciation Rate</b>	=	<b>Depreciation</b>	<b>Depreciation</b>
2020	\$80,000		20%		\$ 8,000*	\$ 8,000
2021	80,000		20%		16,000	24,000
2022	80,000		20%		16,000	40,000
2023	80,000		20%		16,000	56,000
2024	80,000		20%		8,000*	64,000
*One-half a year.						

# Machine #2

	Carrying amount			Annual	Accumulated
<u>Year</u>	Beginning of Year	×	<b>DDB</b> Rate	<b>Depreciation</b>	<b>Depreciation</b>
2023	\$50,000		40%	\$10,000*	\$10,000
2024	40,000		40%	16,000	26,000
*One-ha	lf a year.				

b)		Mach	ine 1	Mach	ine 2
	Depreciation Expense	8,000		16,000	
	Accumulated Depreciation–Equipmen	nt	8,000		16,000
	Cash	20,000		32,000	
	Loss on Disposal	2,000*		-0-	
	Accumulated Depreciation-Equipment	64,000		26,000	
	Equipment		86,000		50,000
	Gain on Disposal		-0-		8,000**

<sup>\*</sup>NBV: \$86,000 - \$64,000 = \$22,000; Proceeds – NBV: \$20,000 - \$22,000 = -\$2,000 [a loss] \*\*NBV: \$50,000 - \$26,000 = \$24,000; Proceeds – NBV: \$32,000 - \$24,000 = \$8,000 [a gain]

Bloomcode: Application Difficulty: Medium

Learning Objective: Apply depreciation methods to property, plant, and equipment.

Section Reference: Depreciation

Learning Objective: Demonstrate how to account for property, plant, and equipment disposals.

Section Reference: Disposal of Property, Plant, and Equipment

**CPA**: Financial Reporting

AACSB: Analytic

# Exercise 24

Mendelsohn Company purchased equipment on January 1, 2024, at a cost of \$48,000. The equipment is expected to have an estimated residual value of \$3,000 at the end of its five-year life. The company's new accountant has used the double diminishing-balance method to depreciate the equipment at December 31, 2024. However, the company has a policy of using the straight-line method to depreciate equipment. Profit for the year ended December 31, 2024, was \$55,000 as the result of depreciating the equipment incorrectly.

#### Instructions

Using the method of depreciation that the company normally follows, prepare the correcting entry and determine the correct profit. (Show calculations.)

# **Solution 24** (10 min.)

Depreciation recorded: $(\$48,000 - \$0) \times 40\%$	\$19,200
Correct depreciation: (\$48,000 – \$3,000) ÷ 5 yrs	9,000
Overstatement of depreciation in 2024	<u>\$10,200</u>

Accumulated Depreciation-Equipment	10,200	
Depreciation Expense		10,200

# Correct profit:

Profit as reported	\$55,000
Add: Overstatement of depreciation expense	10,200
Correct profit	\$65,200

Bloomcode: Application Difficulty: Medium

Learning Objective: Explain the factors that cause changes in periodic depreciation and calculate

revised depreciation for property, plant, and equipment. Section Reference: Revising Periodic Depreciation

**CPA**: Financial Reporting

AACSB: Analytic

# Exercise 25

Equipment was acquired on January 1, 2022, at a cost of \$90,000. The equipment was originally estimated to have a residual value of \$5,000 and an estimated life of 10 years. Depreciation has been recorded through December 31, 2023, using the straight-line method. On December 31, 2024, before recording 2024 depreciation, the estimated residual value was revised to \$6,000 and the

useful life was revised to a total of eight years.

#### Instructions

Determine the depreciation expense for 2024.

# Solution 25 (5 min.)

Calculate the carrying amount at the time of the revision:

```
\frac{\$90,000 - \$5,000}{10 \text{ years}} = \$8,500 \text{ annual depreciation expense}
```

Two years have been depreciated:  $\$8,500 \times 2 = \$17,000$ 

Carrying amount at the time of the revision: \$90,000 - \$17,000 = \$73,000

Calculate the revised annual depreciation:

```
\$73,000 - \$6,000 = \$11,167 revised annual depreciation 6 years remaining
```

The depreciation expense for 2024 is \$11,167.

Bloomcode: Application Difficulty: Medium

Learning Objective: Explain the factors that cause changes in periodic depreciation and calculate

revised depreciation for property, plant, and equipment. Section Reference: Revising Periodic Depreciation

**CPA**: Financial Reporting

AACSB: Analytic

## Exercise 26

On January 1, 2023, Katsumi Company purchased and installed a telephone system at a cost of \$20,000. The equipment was expected to last five years with a residual value of \$3,000. On January 1, 2024, more telephone equipment was purchased to compliment the current system for \$8,000. The new equipment is expected to have a useful life of four years. Through an error, the new equipment was debited to Telephone Expense. Katsumi Company uses the straight-line method of depreciation.

#### Instructions

Prepare a schedule as follows showing the effects of the error on Telephone Expense, Depreciation Expense, and profit for each year and in total beginning in 2024 through the useful life of the new equipment.

	<u>Telephone Expense</u>	<b>Depreciation Expense</b>	<u>Profit</u>
	Overstated	Overstated	Overstated
Year	(Understated)	(Understated)	(Understated)

2024

2025 2026 2027

# **Solution 26** (25 min.)

Year	<u>Telephone Expense</u> Overstated (Understated)	<u>Depreciation Expense</u> Overstated (Understated)	<u>Profit</u> Overstated (Understated)
2024	\$8,000	\$(2,000)	\$(6,000)
2025		(2,000)	2,000
2026		(2,000)	2,000
2027		(2,000)	2,000
Total	\$8,000	\$(8,000)	\$ -0-

Bloomcode: Analysis Difficulty: Medium

Learning Objective: Explain the factors that cause changes in periodic depreciation and calculate

 $revised\ depreciation\ for\ property,\ plant,\ and\ equipment.$ 

Section Reference: Revising Periodic Depreciation

**CPA**: Financial Reporting

AACSB: Analytic

#### Exercise 27

Harrison Rentals purchased an apartment building in January 2016. At the time, the building was expected to have a useful life of 25 years with a residual value of \$100,000, during which time it was projected to generate annual rentals of \$30,000). The building's original cost was \$500,000.

At January 1, 2024, the accumulated depreciation balance on this building was \$128,000, and 2024 depreciation has been recorded as \$16,000. Harrison has a December 31 year end.

During December 2024 Harrison had the following events and transactions related to the building. All transactions are for cash.

- 1. Painted all the walls in the common areas at a cost of \$8,000.
- 2. Replaced the electrical wiring in three suites due to safety concerns at a cost of \$4,500.
- 3. Replaced all of the linoleum flooring in the suites with hardwood, installed in-suite laundry facilities in each unit, and made other improvements at total cost of \$120,000. As a result, the annual rental revenue has been doubled.
- 4. Completed structural repairs to the building at a cost of \$100,000. As a result of this work the building life is expected to be 10 years longer than the original estimate. The residual value estimate has been revised to \$134,000.

#### **Instructions**

- a) Calculate the carrying amount of the building on December 31, 2024. Provide explanations for any increases to building cost.
- b) Record the 2025 depreciation expense using the straight-line basis, assuming that the increased rental rates go into effect January 1, 2025.

# **Solution 27** (15 min.)

a)		
Building cost, balance January 1, 2024	\$500,000	
Add: Item 3 (new flooring and laundries are added to the		
cost because they increase the building's revenue-		
generating capacity)	120,000	
Item 4 (structural repairs are added to the cost because		
this extends the useful life of the building)		
	720,000	
Less: Accumulated depreciation (\$128,000 + \$16,000)	•	
Carrying amount, December 31, 2024	<u>\$576,000</u>	
b)		
Revised depreciable cost (\$576,000 – \$134,000) \$442,000		
Remaining life (from Jan. 1, 2025) = $(25 - 9 + 10)$ 26		
2025 depreciation expense = $$442,000 \div 26$ \$ 17,000		
	47.000	
Depreciation Expense		17.000
Accumulated Depreciation-Building		17,000

Bloomcode: Application Difficulty: Medium

Learning Objective: Explain the factors that cause changes in periodic depreciation and calculate

revised depreciation for property, plant, and equipment.

Section Reference: Revising Periodic Depreciation

**CPA**: Financial Reporting

AACSB: Analytic

## Exercise 28

At January 1, 2024, Penner Auto Repairs owned the following assets:

Asset	Building	Automobiles	Computers	Furniture	
Date purchased	Jan. 1, 2017	Jan. 1, 2023	Jan. 1, 2023	Jan. 1, 2017	
Original cost	\$500,000	\$45,000	\$10,000	\$20,000	
Depreciation method	Straight-line	Diminishing- balance	Straight-line	Straight-line	
Useful life/Depreciation rate	40 years	45%	3 years	15 years	
Estimated residual value	\$200,000	not applicable	\$1,000	\$4,000	
Estimated remaining life (as of January 1, 2024)	33 years	not applicable	2 years	8 years	

Prior to recording depreciation expense for 2024, Penner undertook a review of the assets'

remaining life and value and determined that the following changes are warranted based on currently available information:

Building: No changes Automotive: No changes Computers: Obsolete

Furniture: Remaining life will be 10 years with \$5,000 residual value.

# Instructions

Calculate 2024 depreciation on each of these assets, taking the new information into account. Round all amounts to the nearest dollar.

# **Solution 28** (20 min.)

Bui	ldi	ng
		_

Residual value	\$500,000 \$200,000 \$300,000 40 years \$7,500
----------------	--

# <u>Automobile</u>

Cost	\$45,000
2023 depreciation (\$45,000 x 45%)	\$20,250
Carrying amount Jan. 1, 2024	\$24,750
Depreciation rate	45%
2024 depreciation expense (\$24,750 x 45%)	\$11,138

# **Computers**

Cost	\$10,000
Accumulated depreciation Jan 1, 2024 ( $$10,000 - $1,000$ ) $\div 3 \times 1$	\$3,000
Carrying amount Jan. 1, 2024	\$7,000
Revised residual value	\$-0-
Revised depreciable cost	\$7,000
Remaining life	0 years
2024 depreciation expense (\$7,000 ÷ 1 year)	\$7,000

# <u>Furniture</u>

Cost	\$20,000
Accumulated depreciation Jan. $1/24$ (\$20,000 – \$4,000) $\div$ 15 x 7	\$7,467
Carrying amount Jan. 1/24	\$12,533
Revised residual value	\$5,000
Revised depreciable cost	\$7,533
Remaining life	10 years
2024 depreciation expense	\$753

Bloomcode: Application Difficulty: Medium

Learning Objective: Explain the factors that cause changes in periodic depreciation and calculate

revised depreciation for property, plant, and equipment.

Section Reference: Revising Periodic Depreciation

**CPA:** Financial Reporting

AACSB: Analytic

#### Exercise 29

Redwood Company performs an assessment annually for possible impairment losses and has gathered the following information pertaining to selected assets at December 31, 2024:

Asset	Building	Equipment	Computers	Furniture
Original cost	\$400,000	\$245,000	\$100,000	\$20,000
Accumulated depreciation	220,000	16,000	20,000	13,000
Recoverable amount	550,000	225,000	70,000	8,000
Impairment loss (if any)	?	?	?	?

#### Instructions

Determine if the assets identified by Redwood are impaired and prepare any necessary adjusting entries to record the impairments.

# **Solution 29** (10 min.)

Asset	Building	Equipment	Computers	Furniture	
Original cost	\$400,000	\$245,000	\$100,000	\$20,000	
Accumulated depreciation	220,000	16,000	20,000	13,000	
Recoverable amount	550,000	225,000	70,000	8,000	
Impairment loss (if any)	0	4,000	10,000	0	

Accumulated Depreciation–Equipment .......

Accumulated Depreciation–Equipment (Computers)

Carrying amount = \$345,000 - \$16,000 - \$20,000 = \$309,000

Impairment loss = \$309,000 - \$295,000 = \$14,000

Bloomcode: Application Difficulty: Medium

Learning Objective: Explain the factors that cause changes in periodic depreciation and calculate

revised depreciation for property, plant, and equipment.

Section Reference: Revising Periodic Depreciation

**CPA:** Financial Reporting

AACSB: Analytic

#### Exercise 30

The following assets were sold by DNC Company during the 2024 fiscal year. The company's year end is December 31.

Asset	Vehicles	Equipment	Furniture
Original cost	\$60,000	\$8,000	\$18,000
Accumulated depreciation (December 31, 2023)	\$35,000	\$7,000	\$7,000

4,000

10,000

Depreciation method	Diminishing-balance	Straight-line	Straight-line
Depreciation rate/years remaining	25%	2 years	8 years
Estimated residual value	not applicable	not applicable	not applicable
Selling price	\$22,500	\$708	\$14,000
Date of sale in 2024	April 1	August 1	October 31

# Instructions

Calculate the gain or loss on disposal for each asset sold and prepare any necessary journal entries to record the disposals for DNC. (Round to the nearest dollar)

Solution 30	0 (15 min.)		
Apr. 1	Depreciation Expense	1,563	1,563
	Cash	22,500	
	Accumulated Depreciation–Vehicles (\$35,000 + \$1,563)	36,563	
	Loss on Disposal	937	
	Vehicles		60,000
Aug. 1	Depreciation Expense	292	292
	Cash	708	
	Accumulated Depreciation – Equipment (\$7,000 + \$292)	7,292	
	Equipment		8,000
Oct. 31	Depreciation Expense	1,146	1,146
	Cash	14,000	
	Accumulated Depreciation–Furniture (\$7,000 + \$1,146)	8,146	
	Gain on Disposal		4,146
	Furniture		18,000

Bloomcode: Application Difficulty: Medium

Learning Objective: Demonstrate how to account for property, plant, and equipment disposals.

Section Reference: Disposal of Property, Plant, and Equipment

**CPA:** Financial Reporting

AACSB: Analytic

## Exercise 31

1. Lui Company purchased equipment in 2017 for \$80,000 and estimated an \$8,000 residual value at the end of the equipment's 10-year useful life. At December 31, 2023, there was \$50,400 in the Accumulated Depreciation account for this equipment using the straight-line

- method of depreciation. On March 31, 2024, the equipment was sold for \$21,000. Prepare the appropriate journal entries to record the sale of the equipment for Lui Company.
- 2. Gagne Company sold a delivery truck for \$11,000. The delivery truck originally cost \$25,000 in 2020 and \$6,000 was spent on a major overhaul in 2021 (charged to the Vehicles account). Accumulated depreciation on the delivery truck to the date of disposal was \$20,000. Prepare the appropriate journal entry to record the disposition of the delivery truck.
- 3. Crenshaw Company sold office equipment that had a carrying amount of \$4,500 for \$6,000. The office equipment originally cost \$15,000 and it is estimated that it would cost \$19,000 to replace the office equipment. Prepare the appropriate journal entry to record the disposition of the office equipment.

# **Solution 31** (15 min.)

1.	Depreciation Expense	1,800	1,800
	Cash	21,000 6,800 52,200	80,000
2.	Cash	11,000 20,000	31,000
3.	Cash Accumulated Depreciation–Equipment Equipment Gain on Disposal To record disposal of office equipment at a gain.	6,000 10,500	15,000 1,500

Bloomcode: Application Difficulty: Medium

Learning Objective: Demonstrate how to account for property, plant, and equipment disposals.

Section Reference: Disposal of Property, Plant, and Equipment

**CPA**: Financial Reporting

AACSB: Analytic

## Exercise 32

Zedel Delivery Services has a December 31, 2024, year end. On January 1, 2024, Zedel has a delivery van with a cost of \$35,000 and accumulated depreciation of \$12,000. The van was expected to have a residual value of \$5,000 and a useful life of five years. Zedel uses straight-line depreciation. Zedel plans to replace its delivery van on April 1, 2024, and is considering two alternatives:

1. Zedel has been offered \$14,000 for the old van. If Zedel accepts this offer, Zedel would then purchase a replacement for \$50,000 cash.

2. Trade the old van for a new one. The dealer will allow a \$22,000 trade-in allowance on the old van, and Zedel will have to pay additional cash of \$28,000.

# Instructions

- a) Record the updated depreciation on the old van to April 1, 2024.
- b) Record the disposal of the van under each of the two alternatives.
- c) Which alternative do you recommend and why?

# **Solution 32** (15 min.)

a) Depreciation Jan. 1 – Apr. 1, 2024:  $(\$35,000 - \$5,000) \div 5 \times 3/12 = \$1,500$ 

Apr.	1	Depreciation Expense	1,500	1,500
b) <u>Optio</u>	on 1:			
		Cash	14,000	
		Accumulated Depreciation–Vehicles (\$12,000 + \$1,500)	13,500	
		Loss on Disposal	7,500	
		Vehicles (old)		35,000
		Vehicles (new)	50,000	
		Cash		50,000
<u>Optio</u>	on 2:			
-		Vehicles (new) (\$22,000 + \$28,000)	50,000	
		Accumulated Depreciation-Vehicles	13,500	
		Gain on Disposal	•	500
		Vehicles (old)		35,000

c) Cash required for alternative #1 (\$50,000 - \$14,000) = \$36,000. Cash required for alternative #2 = \$28,000.

Because the second option requires less cash to acquire the same van, it is the recommended option.

Bloomcode: Application Difficulty: Medium

Learning Objective: Demonstrate how to account for property, plant, and equipment disposals.

Section Reference: Disposal of Property, Plant, and Equipment

CPA: Financial Reporting

AACSB: Analytic

#### Exercise 33

Presented below are selected transactions for Donald Company for 2024:

Jan. 1 Received \$3,000 scrap value on retirement of equipment that was purchased on January

28,000

- 1, 2013. The equipment cost \$80,000 on that date, and had an estimated useful life of 10 years with no residual value.
- Apr. 30 Sold equipment for \$50,000 that was purchased on January 1, 2021. The equipment cost \$90,000, and had an estimated useful life of five years with no residual value.
- Dec. 31 Scrapped a business automobile that was purchased on September 1, 2019. The car cost \$20,000 and was depreciated on an eight-year useful life with a residual value of \$800.

#### Instructions

Journalize all entries required as a result of the above transactions. Donald Company uses the straight-line method of depreciation and has recorded depreciation to December 31, 2023.

# **Solution 33** (15 min.)

	(13 11111)		
Jan. 1	Cash	3,000	
	Accumulated Depreciation–Equipment	80,000	
	Equipment		80,000
	Gain on Disposal		3,000
	1		,
Apr. 30	Depreciation Expense	6,000	
11p11 00	Accumulated Depreciation–Equipment	0,000	6,000
	$(\$90,000 \div 5) \times 4/12 = \$6,000$		0,000
	$($70,000 + 3) \times 4/12 - $0,000$		
	Cash	50,000	
		•	
	Accumulated Depreciation–Equipment	60,000	
	$(\$18,000 \times 3) + \$6,000$		
	Equipment		90,000
	Gain on Disposal (\$50,000 - \$30,000)		20,000
Dec. 31	Depreciation Expense	2,400	
	Accumulated Depreciation–Vehicles	•	2,400
	$(\$20,000 - \$800) \div 8 = \$2,400$		_,100
	$(420,000 - 4000) \cdot 0 = 42,100$		
	Accumulated Depreciation-Vehicles	12,800	
	<u> </u>	12,000	
	$(\$2,400 \times 5) + (\$2,400 \times 1/3)$	7.200	
	Loss on Disposal	7,200	
	Vehicles		20,000

Bloomcode: Application Difficulty: Medium

Learning Objective: Demonstrate how to account for property, plant, and equipment disposals.

Section Reference: Disposal of Property, Plant, and Equipment

**CPA**: Financial Reporting

AACSB: Analytic

## Exercise 34

On January 1, 2024, Jelly Stone Industries invested \$2,000,000 in land that includes a stand of timber and the rights to cut the timber. The property is expected to yield 50,000 cubic metres of timber. After the amount of lumber permitted by law has been cut, Jelly Stone expects to be able to sell the land for \$400,000 less \$150,000 that must be spent on reforestation. Jelly Stone invested a further \$300,000 in equipment that is expected to last for the same number of units as the property

yields, with no residual value.

#### Instructions

- a) Using the units-of-production method, calculate depletion/depreciation for 2024 on both the timber investment and for the equipment, assuming that 12,000 cubic metres are sawn in the year.
- b) Explain why the units-of-production method is considered the most appropriate method for depletion of natural resources.

# **Solution 34** (10 min.)

a) Depletion of timber:

```
($2,000,000 - [$400,000 - $150,000]) \div 50,000 = $35 \text{ per cubic metre}; $35 \times 12,000 = $420,000
```

Depreciation of equipment:

```
$300,000 \div 50,000 = $6 \text{ per cubic metre}; $6 \times 12,000 = $72,000
```

b) The units-of-production method is considered appropriate because the cost of the asset is matched exactly with the asset being physically used up. This will also result in a good matching of expenses with revenues, which are also determined on a per-unit basis.

Bloomcode: Application Difficulty: Medium

Learning Objective: Record natural resource transactions and calculate depletion.

Section Reference: Natural Resources

**CPA:** Financial Reporting

AACSB: Analytic

## Exercise 35

Johansan Mining Company purchased a mine for \$80 million, which is estimated to have 250,000 tonnes of ore and a residual value of \$10 million. In the first year, 50,000 tonnes of ore are extracted and sold. In the second year, 150,000 tonnes of ore are extracted but only 125,000 tonnes are sold.

# Instructions

- a) Prepare the journal entry to record depletion expense for the first year and the second year.
- b) What amount and in what account are the tonnes of ore not sold reported?

# **Solution 35** (10 min.)

a) Calculation of the depletion expense/tonne of ore:  $(\$80,000,000 - \$10,000,000) \div 250,000 \text{ tonnes} = \$280 \text{ per tonne}$ 

The ore that is extracted and not sold remains in an Inventory account in the current assets section of the balance sheet. In this case \$7,000,000 (25,000  $\times$  \$280) should be reported as inventory. The amount related to the ore that is extracted and sold [\$35,000,000 = 125,000 x \$280] will be transferred to the Cost of Goods Sold account along with all the other costs of extracting the ore.

Bloomcode: Application Difficulty: Medium

Learning Objective: Record natural resource transactions and calculate depletion.

Section Reference: Natural Resources

CPA: Financial Reporting

AACSB: Analytic

#### Exercise 36

McGuinness Mining Company purchased land containing an estimated 15 million tonnes of ore at a cost of \$5,400,000. The land without the ore is estimated to be worth \$600,000. The company expects to operate the mine for 10 years. Buildings costing \$800,000 are erected on the site and are depreciated over the life of the mine. Equipment costing \$1,000,000 is depreciated over the life of the mine. The buildings and the equipment possess no residual value after the mine is closed. During the first year of operations, the mining company mined and sold 2 million tonnes of ore.

## Instructions

- a) Calculate the depletion cost per tonne of the mine.
- b) Calculate the depletion expense for the first year on the mine.

# **Solution 36** (20 min.)

- a) Depletion cost per tonne:  $(\$5,400,000 \$600,000) \div 15$  million tonnes of ore = \$0.32 per tonne
- b)  $2,000,000 \text{ tonnes} \times \$0.32 = \$640,000$

Bloomcode: Application Difficulty: Medium

Learning Objective: Record natural resource transactions and calculate depletion.

Section Reference: Natural Resources

**CPA**: Financial Reporting

AACSB: Analytic

## Exercise 37

Kewais Company invested \$6 million for the rights to explore and extract natural resources from land in Ukraine. The company estimated that a total of 1.5 million tonnes of ore would be extracted from the property. The company extracted 50,000 tonnes of ore in year 1, 110,000 tonnes of ore in year 2, and 205,000 tonnes of ore in year 3.

#### Instructions

Prepare the necessary journal entries to record depletion expense in all three years.

# Solution 37 (5 min.)

Depletion rate = \$6,000,000/1,500,000 tonnes = \$4 per tonne of ore extracted

Year 1	Inventory (\$4 x 50,000)Accumulated Depletion–Resource	200,000	200,000
Year 2	Inventory (\$4 x 110,000)	440,000	440,000
Year 3	Inventory (\$4 x 205,000)	820,000	820,000

Bloomcode: Application Difficulty: Medium

Learning Objective: Record natural resource transactions and calculate depletion.

Section Reference: Natural Resources

**CPA: Financial Reporting** 

AACSB: Analytic

#### Exercise 38

Below are several transactions for McLaughlin Inc.:

- 1. Timber rights were purchased on a tract of land for \$600,000. The timber is estimated at 2,800 cubic metres. During the current year, 180 cubic metres of timber were cut and sold.
- 2. A company purchased another company on July 1 and recorded goodwill of \$400,000.
- 3. Costs of \$18,000 were incurred on January 1 to obtain a patent. Shortly thereafter, \$9,000 was spent in legal costs to successfully defend the patent against competitors. The patent has a legal life of 20 years and an estimated nine-year useful life.
- 4. The company acquired a trademark for the cost of \$25,000. The trademark has 20 years until it expires and then it can be renewed for another 20 years for the cost of \$25.

## Instructions

For each of the unrelated transactions, determine the amount of the depreciation, depletion, or amortization expense for the current year and present the adjusting entries required to record each expense at year end.

# **Solution 38** (10 min.)

1. Calculation of depletion/cubic metre:

 $$600,000 \div 2,800 = $214.29$ /cubic metre

 $180 \times \$214.29 = \$38.572$ 

- 2. No entry. Goodwill is not amortized.
- 3. Legal costs to successfully defend a patent are capitalized.

Amortization Expense 3,000
Accumulated Amortization–Patent 3,000  $(\$27,000 \div 9 \text{ years} = \$3,000)$ 

4. No amortization is necessary. The trademark can be renewed for a small cost and thus it may be treated as if it has indefinite life.

Bloomcode: Application Difficulty: Medium

Learning Objective: Record natural resource transactions and calculate depletion.

Section Reference: Natural Resources

Learning Objective: Identify the basic accounting issues for intangible assets and goodwill.

Section Reference: Intangible Assets and Goodwill

**CPA**: Financial Reporting

AACSB: Analytic

#### Exercise 39

During the current year, Lui Company incurred several expenditures:

- 1. Spent \$50,000 in legal costs in a patent defence suit. The patent was unsuccessfully defended.
- 2. Purchased a trademark from another company. The trademark can be renewed indefinitely. Lui Company expected the trademark to contribute to revenue indefinitely.
- 3. Lui Company acquired a patent for \$2,000,000. The company selling the patent has spent \$1,000,000 on the research and development of it. The patent has a remaining legal life of 15 years and an estimated five-year useful life.
- 4. Lui Company is spending considerable time and money in developing a different patent for another product. So far, \$3,000,000 has been spent this year on research. Lui Company is very confident it will obtain this patent in the next few years.

#### Instructions

Briefly explain whether the expenditures listed above should be recorded as an operating expense or as an intangible asset. If you view the expenditure as an intangible asset, indicate whether the asset should be amortized or not, and if so, the number of years over which it should be amortized. Explain your answer.

# **Solution 39** (10 min.)

- 1. Operating expense. Only successful patent defence costs can be capitalized.
- 2. Intangible asset. Trademarks are renewable. Since Lui Company expects to use the trademark indefinitely, no amortization is recorded.
- 3. Intangible asset. The patent cost of \$2,000,000 should be amortized over its expected remaining useful life of five years since this is shorter than the remaining legal life of 15 years.
- 4. Operating expense. Research costs should be expensed when incurred.

Bloomcode: Analysis Difficulty: Medium

Learning Objective: Identify the basic accounting issues for intangible assets and goodwill.

Section Reference: Intangible Assets and Goodwill

**CPA**: Financial Reporting

AACSB: Analytic

#### Exercise 40

- 1. A company purchased a patent on January 1, 2024, for \$2,500,000. The patent's legal life is 20 years but the company estimates that the patent's useful life will only be five years from the date of acquisition. On June 30, 2024, the company paid legal costs of \$162,000 in successfully defending the patent in an infringement suit. Prepare the journal entry to amortize the patent at year end on December 31, 2024.
- 2. Walker Company purchased a franchise from Tasty Food Company for \$400,000 on January 1, 2024. The franchise is for an indefinite time period and gives Walker Company the exclusive rights to sell Tasty Wings in a particular territory. Prepare the journal entry to record the acquisition of the franchise and any necessary adjusting entry at year end on December 31, 2024.
- 3. Chernomyrdin Company incurred research costs of \$200,000 and successful development costs of \$500,000 in 2024 in developing a new product that the company was able to patent in early January 2024. The company expects the product to be useful for 10 years. Prepare the necessary journal entries during 2024 to record these events and any adjustments at year end on December 31, 2024.

# **Solution 40** (15 min.)

Solu	<b>ition 40</b> (15 min.)			
1.	December 31, 2024			
	Amortization Expense		518,000	
	Accumulated Amortization-Patent			518,000
	To record patent amortization			,
	•	\$500,000		
	$$162,000 \div 54 \text{ months} = $3,000 \times 6 \text{ months}$	18,000		
		<u>\$518,000</u>		
0	1 0004			
2.	January 1, 2024			
	Franchise		400,000	
	Cash			400,000
	To record acquisition of Tasty Food franchise.			
	December 31, 2024			
	Indefinite life, no amortization necessary; no entry.			
3.	2024			
	Research Expense		200,000	
	Cash		200,000	200,000
				200,000
	To record research expense for the current year.			
	Determ		T00 000	
	Patent		500,000	= 0 0 0 0 0
	Cash			500,000
	To capitalize development costs.			

December 31, 2024

Amortization Expense (\$500,000 ÷ 10 years)	50,000	<b>50.000</b>
Accumulated Amortization–PatentTo record amortization of successful development costs relating to the patent.		50,000
Bloomcode: Application Difficulty: Medium Learning Objective: Identify the basic accounting issues for intangible assets Section Reference: Intangible Assets and Goodwill CPA: Financial Reporting AACSB: Analytic	and goodwil	11.
Exercise 41 Identify whether the following intangible assets are considered finite life (F)	or indefinite	e life (I).
Franchise		
Patents		
Goodwill		
Development Costs		
Trademarks		
Licence		
Copyrights		
Solution 41 (5 min.)		
_I_ Franchise		
_F_ Patents		
_I_ Goodwill		
_F_ Development Costs		
_I_ Trademarks		
_I_ Licence		
_F_ Copyrights		
Bloomcode: Knowledge Difficulty: Easy Learning Objective: Identify the basic accounting issues for intangible assets Section Reference: Intangible Assets and Goodwill	and goodwil	1.

CPA: Financial Reporting

AACSB: Analytic

#### Exercise 42

During 2024 Blackmud Research had the following transactions for cash. This is Blackmud's first year of operations.

- Mar. 1 Registered a new patent, with a legal life of 20 years, at a cost of \$30,000.
- June 30 Incurred research costs of \$68,000.
- Aug. 1 Incurred development costs of \$50,000 related to a product that meets the standards required for capitalization of costs. The costs are expected to provide commercial benefits for five years.
- Aug. 31 Purchased a trademark with an indefinite life for \$102,000.
- Nov. 1 Purchased software copyright for \$300,000. The copyright has a remaining legal life of 30 years, and the related software is expected to produce revenue for six years.

#### Instructions

- a) Record the transactions.
- b) Prepare the section of the December 31, 2024, balance sheet of Blackmud Research that reports intangible assets. Show calculations where applicable.

# **Solution 42** (20 min.)

a)	- <b>-</b> (- · ······)		
	Patent	30,000	
	Cash		30,000
June 30	Research Expense	68,000	
•	Cash	•	68,000
Aug. 1	Development Costs	50,000	
nug. 1	Cash	50,000	50,000
Aug 21	Trademark	102 000	
Aug. 31	Cash	102,000	102,000
			ŕ
Nov. 1	Copyright Cash	300,000	300,000
	00011		300,000
b)			

# BLACKMUD RESEARCH Balance Sheet (partial) December 31, 2024

Intangible assets (non-current assets)

Finite-life intangible assets $(\$30,000 + \$50,000 + \$300,000)$	\$380,000	
Less: Accumulated amortization*	13,750	\$366,250
Indefinite-life intangible assets		102,000
Total intangible assets		\$ <u>468,250</u>

#### Amortization:

Patent = $(\$30,000 \div 20 \times 10/12)$	\$ 1,250
Development costs ( $\$50,000 \div 5 \times 5/12$ )	4,167
Copyright (\$300,000 ÷ 6 x 2/12)	8,333
Total	\$ <u>13,750</u>

Bloomcode: Application Difficulty: Medium

Learning Objective: Identify the basic accounting issues for intangible assets and goodwill.

Section Reference: Intangible Assets and Goodwill

Learning Objective: Illustrate the reporting and analysis of long-lived assets.

Section Reference: Statement Presentation and Analysis

**CPA**: Financial Reporting

AACSB: Analytic

#### Exercise 43

The following information is available from the audited financial statements of Molson Coors Brewing Company and Big Rock Breweries Income Trust for their year ends.

	Molson/Coors	Big Rock Breweries
	(in millions of US dollars)	(in thousands of Cdn. dollars)
Net revenue	\$ 5,844	\$ 38,701
Profit	373	8,380
Total assets, ending	11,603	42,170
Total assets, beginning	11,799	41,786

# Instructions

- a) Calculate both companies' asset turnover and return on assets. Round to two decimal places.
- b) Compare the companies' effectiveness in using their assets to produce revenue and profit.

# **Solution 43** (10 min.)

a)

	Molson/Coors	Big Rock
Asset turnover	$$5,844 \div [(\$11,603 + \$11,799) \div 2]$	$$38,701 \div [(\$42,170 + \$41,786) \div 2]$
	= 0.50 times	= 0.92 times
Return on assets	$$373 \div [(\$11,603 + \$11,799) \div 2]$	$\$8,380 \div [(\$42,170 + \$41,786) \div 2]$
	= 3.19%	= 19.96%

b) Big Rock's performance in asset management is better when measured by either of the two ratios. This suggests that Big Rock is more effective in using its assets to generate revenue and profit even though it is a smaller company.

Bloomcode: Application Difficulty: Medium

Learning Objective: Illustrate the reporting and analysis of long-lived assets.

Section Reference: Statement Presentation and Analysis

**CPA:** Financial Reporting

# AACSB: Analytic

# Exercise 44

Presented below is information related to long-lived assets at year end on December 31, 2024, for Jankowski Company:

Buildings	\$1,080,000
Goodwill	
Patents	600,000
Coal mine	390,000
Accumulated depreciation-building	670,000
Accumulated depletion-coal mine	275,000
Accumulated amortization-patents	120,000

#### Instructions

Prepare a partial balance sheet for Jankowski Company that shows how the above listed items would be presented.

# **Solution 44** (10 min.)

# JANKOWSKI COMPANY Balance Sheet (Partial) December 31, 2024

Property, Plant, and Equipment		
Buildings	\$1,080,000	
Less: Accumulated depreciation-buildings	670,000	\$ 410,000
Coal mine	390,000	
Less: Accumulated depletion–resource	275,000	115,000
Total property, plant, and equipment		525,000
Intangible Assets		
Patents	600,000	
Less: Accumulated amortization-patents	<u>120,000</u>	
Total Intangible Assets		480,000
Goodwill		420,000
Total long-lived assets		<u>\$1,425,000</u>

Bloomcode: Analysis Difficulty: Medium

Learning Objective: Illustrate the reporting and analysis of long-lived assets.

Section Reference: Statement Presentation and Analysis

**CPA:** Financial Reporting

AACSB: Analytic

# Exercise 45

Indicate in the blank spaces below, the appropriate group heading for financial reporting purposes.

# Test Bank for Accounting Principles, Ninth Canadian Edition

Use	the follo PPE NR I O N/A	owing code to identify your answer: Property, Plant, and Equipment Natural Resources Intangible Assets Other Not on the balance sheet					
	_ 1.	Goodwill		7.	Timberlands		
	_ 2.	Land improvements		8.	Franchises		
	3.	Development costs for a patented product		9.	Licences		
	_ 4.	Accumulated depreciation-buildings		10.	Equipment		
	_ 5.	Trademarks		11.	Depreciation expense		
	6.	Research costs		12.	Land		
Solution 45 (5 min.)							
1.	0	Goodwill					
2.	PPE	Land improvements					
3.	I	Development costs for a patented produ	uct				
4.	PPE	Accumulated depreciation-buildings					
5.	I	Trademarks					
6.	N/A	Research costs					
7.	NR	Timberlands					
8.	I	Franchises					
9.	I	Licences					
10.	PPE	Equipment					
11.	N/A	Depreciation expense					
12.	PPE or	NR Land					
Bloomcode: Analysis Difficulty: Medium							

Learning Objective: Illustrate the reporting and analysis of long-lived assets.

Section Reference: Statement Presentation and Analysis

**CPA:** Financial Reporting

AACSB: Analytic

#### Exercise 46

Net sales were \$1,500,000 and profit was \$250,000 in the second year of operation for Tirekicker's Used Car Company. Total assets in the first year were \$800,000 and in the second year \$1,200,000.

# Instructions

- a) Determine the asset turnover and the return on assets for Tirekicker's Used Car Company.
- b) What do these ratios show?

# Solution 46 (5 min.)

a) Asset turnover = Net sales  $\div$  Average assets =  $\$1,500,000 \div [(\$800,000 + \$1,200,000) \div 2)] = 1.5 times$ 

Return on assets = Profit 
$$\div$$
 Average assets =  $\$250,000 \div [(\$800,000 + \$1,200,000) \div 2)] = 25\%$ 

b) The asset turnover ratio shows how efficiently a company uses its assets to generate sales revenue. The return on assets ratio shows the profitability of assets used in the earning process.

Bloomcode: Application Difficulty: Medium

Learning Objective: Illustrate the reporting and analysis of long-lived assets.

Section Reference: Statement Presentation and Analysis

**CPA:** Financial Reporting

AACSB: Analytic

# Exercise 47

The following information is taken from the records of Wasp Industrial Ltd.

	2025	2024	2023
Total assets reported at year end	\$14,110,500	\$12,083,700	\$10,669,900
Sales revenue	2,037,210	2,097,100	2,120,500
Sales discounts	14,521	17,554	16,808
Total expenses	875,770	890,425	925,860

#### Instructions

- a) Calculate the 2025 and 2024 asset turnover and return on assets.
- b) Briefly interpret the results of each ratio examined in part a).

# **Solution 47** (10 min.)

a) 2025 asset turnover =

$$(\$2,037,210 - \$14,521) \div [(\$14,110,500 + \$12,083,700) \div 2] = 0.15$$

```
2024 asset turnover =  (\$2,097,100 - \$17,554) \div [(\$12,083,700 + \$10,669,900) \div 2] = \underline{0.18}  2025 return on assets =  (\$2,037,210 - \$14,521 - \$875,770)/[(\$14,110,500 + \$12,083,700) \div 2] = \underline{0.09}  2024 return on assets =  (\$2,097,100 - \$17,554 - \$890,425)/[(\$12,083,700 + \$10,669,900) \div 2] = \underline{0.10}
```

b) The asset turnover ratio suggests that for each dollar that Wasp has invested in assets, it produced \$0.15 (2025) and \$0.18 (2024) in sales. This demonstrates a declining trend that should be closely compared to the industry average.

The return on assets ratio suggests that Wasp generated profits of 9% (2025) and 10% (2024) for every dollar invested in assets. This demonstrates a declining trend that should be closely compared to the industry average.

Bloomcode: Application Difficulty: Medium

Learning Objective: Illustrate the reporting and analysis of long-lived assets.

Section Reference: Statement Presentation and Analysis

**CPA:** Financial Reporting

AACSB: Analytic

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