***Math for Business and Finance: An Algebraic Approach, 2e* (Slater)**

**Chapter 1 Problem Solving with Math**

1) The problem should be stated in the decision-making process.

Answer: TRUE

Explanation: Review your notes on terminology and vocabulary related to this material.

Difficulty: 1 Easy

Topic: LU 01-01 Reading, Writing, and Rounding Numbers

Learning Objective: 01-01 (3) Dissect and solve a word problem using the blueprint aid.

Bloom's: Remember

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

2) Commas separate every three digits from left to right.

Answer: FALSE

Explanation: Review your notes on terminology and vocabulary related to this material. Commas separate every three digits from **right to left.**

Difficulty: 1 Easy

Topic: LU 01-01 Reading, Writing, and Rounding Numbers

Learning Objective: 01-01 (1) Read and write numeric and verbal numbers using place values.

Bloom's: Remember

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

3) Place value of the hundreds position is to the right of the tens position.

Answer: FALSE

Explanation: Review your notes on terminology and vocabulary related to this material. Place value of the hundreds position is to the **left** of the tens position.

Difficulty: 1 Easy

Topic: LU 01-01 Reading, Writing, and Rounding Numbers

Learning Objective: 01-01 (1) Read and write numeric and verbal numbers using place values.

Bloom's: Remember

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

4) 5,986 in verbal is written as five thousand and nine hundred eighty-six.

Answer: FALSE

Explanation: Review your notes on terminology and vocabulary related to this material. Five thousand nine hundred eighty-six.

Difficulty: 1 Easy

Topic: LU 01-01 Reading, Writing, and Rounding Numbers

Learning Objective: 01-01 (1) Read and write numeric and verbal numbers using place values.

Bloom's: Remember

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

5) Rounding approximates actual answers.

Answer: TRUE

Explanation: Review your notes on terminology and vocabulary related to this material.

Difficulty: 1 Easy

Topic: LU 01-01 Reading, Writing, and Rounding Numbers

Learning Objective: 01-01 (2) Round numbers to the indicated position.

Bloom's: Remember

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

6) Rounding all the way means there are two nonzero digits remaining.

Answer: FALSE

Explanation: Review your notes on terminology and vocabulary related to this material. Rounding all the way means there is only **one** nonzero digit remaining.

Difficulty: 1 Easy

Topic: LU 01-01 Reading, Writing, and Rounding Numbers

Learning Objective: 01-01 (2) Round numbers to the indicated position.

Bloom's: Remember

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

7) The first step in rounding is to identify the place value of the digit to be rounded.

Answer: TRUE

Explanation: Review your notes on terminology and vocabulary related to this material.

Difficulty: 1 Easy

Topic: LU 01-01 Reading, Writing, and Rounding Numbers

Learning Objective: 01-01 (2) Round numbers to the indicated position.

Bloom's: Remember

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

8) Rounding up occurs if the digit to the right of the identified digit is 5 or less.

Answer: FALSE

Explanation: Review your notes on terminology and vocabulary related to this material. Rounding up occurs if the digit to the right of the identified digit is 5 or **more**.

Difficulty: 1 Easy

Topic: LU 01-01 Reading, Writing, and Rounding Numbers

Learning Objective: 01-01 (2) Round numbers to the indicated position.

Bloom's: Remember

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

9) 42,515 rounded to the nearest thousand is 43,000.

Answer: TRUE

Explanation: Review your notes on terminology and vocabulary related to this material.

Difficulty: 2 Medium

Topic: LU 01-01 Reading, Writing, and Rounding Numbers

Learning Objective: 01-01 (1) Read and write numeric and verbal numbers using place values.; 01-01 (2) Round numbers to the indicated position.

Bloom's: Remember

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

10) 586 rounded to the nearest ten is 580.

Answer: FALSE

Explanation: Review your notes on terminology and vocabulary related to this material. 586 rounded to the nearest ten is **590.**

Difficulty: 2 Medium

Topic: LU 01-01 Reading, Writing, and Rounding Numbers

Learning Objective: 01-01 (1) Read and write numeric and verbal numbers using place values.; 01-01 (2) Round numbers to the indicated position.

Bloom's: Remember

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

11) 258 rounded all the way is 300.

Answer: TRUE

Explanation: Review your notes on terminology and vocabulary related to this material.

Difficulty: 2 Medium

Topic: LU 01-01 Reading, Writing, and Rounding Numbers

Learning Objective: 01-01 (1) Read and write numeric and verbal numbers using place values.; 01-01 (2) Round numbers to the indicated position.

Bloom's: Remember

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

12) Two or more numbers combined to make one number are called sums.

Answer: FALSE

Explanation: Review your notes on terminology and vocabulary related to this material. Two or more numbers combined to make one number are called **addends**.

Difficulty: 1 Easy

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (1) Add whole numbers.

Bloom's: Remember

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

13) The total of addends is called the sum.

Answer: TRUE

Explanation: Review your notes on terminology and vocabulary related to this material.

Difficulty: 1 Easy

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (1) Add whole numbers.

Bloom's: Remember

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

14) Adding is always done from bottom to top.

Answer: FALSE

Explanation: Review your notes on terminology and vocabulary related to this material.

Difficulty: 1 Easy

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (1) Add whole numbers.

Bloom's: Remember

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

15) The opposite of addition is subtraction.

Answer: TRUE

Explanation: Review your notes on terminology and vocabulary related to this material.

Difficulty: 1 Easy

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (1) Add whole numbers.

Bloom's: Remember

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

16) In subtraction, borrowing from the column at the left is often necessary.

Answer: TRUE

Explanation: Review your notes on terminology and vocabulary related to this material.

Difficulty: 1 Easy

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (2) Subtract whole numbers.

Bloom's: Remember

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

17) In subtraction the minuend is the smaller number.

Answer: FALSE

Explanation: Review your notes on terminology and vocabulary related to this material.

Difficulty: 1 Easy

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (2) Subtract whole numbers.

Bloom's: Remember

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

18) 512 minus 285 equals a subtrahend of 227.

Answer: FALSE

Explanation: Review your notes on terminology and vocabulary related to this material. 512 minus 285 equals a **difference** of 227.

Difficulty: 1 Easy

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (2) Subtract whole numbers.

Bloom's: Remember

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

19) Multiplication is a shortcut to addition.

Answer: TRUE

Explanation: Review your notes on terminology and vocabulary related to this material.

Difficulty: 1 Easy

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (3) Multiply whole numbers.

Bloom's: Remember

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

20) The multiplicand times the product equals the multiplier.

Answer: FALSE

Explanation: Review your notes on terminology and vocabulary related to this material. The multiplicand times the **multiplier** equals the **product.**

Difficulty: 1 Easy

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (3) Multiply whole numbers.

Bloom's: Remember

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

21) Zeros at the end of the multiplier and/or multiplicand are never attached to the product.

Answer: FALSE

Explanation: Review your notes on terminology and vocabulary related to this material.

Difficulty: 1 Easy

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (3) Multiply whole numbers.

Bloom's: Remember

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

22) 55 × 100 means attaching two zeros to the number being multiplied.

Answer: TRUE

Explanation: Review your notes on terminology and vocabulary related to this material.

Difficulty: 1 Easy

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (3) Multiply whole numbers.

Bloom's: Remember

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

23) Divisor + quotient + remainder = dividend.

Answer: FALSE

Explanation: Review your notes on terminology and vocabulary related to this material. Divisor **×** Quotient + Remainder = Dividend

Difficulty: 2 Medium

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (4) Divide whole numbers.

Bloom's: Remember

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

24) Division is the reverse of multiplication.

Answer: TRUE

Explanation: Review your notes on terminology and vocabulary related to this material.

Difficulty: 1 Easy

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (4) Divide whole numbers.

Bloom's: Remember

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

25) Short division is rarely done when the divisor is one digit.

Answer: FALSE

Explanation: Review your notes on terminology and vocabulary related to this material. When the divisor has only one digit, it is referred to as short division.

Difficulty: 1 Easy

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (4) Divide whole numbers.

Bloom's: Remember

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

26) 1.4 + .14 + 20.001 equals 21.451.

Answer: FALSE

Explanation: 1.4 + .14 + 20.001 equals 21.541.

Difficulty: 2 Medium

Topic: LU 01-03 Performing Basic Math Functions with Decimals

Learning Objective: 01-03 (1) Add, subtract, multiply, and divide decimals.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

27) 5.11 times 6.5 equals 33.215.

Answer: TRUE

Explanation: 5.11 times 6.5 equals 33.215.

Difficulty: 2 Medium

Topic: LU 01-03 Performing Basic Math Functions with Decimals

Learning Objective: 01-03 (1) Add, subtract, multiply, and divide decimals.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

28) 275 divided by 1.5 equals 183.33 rounded to the nearest thousandth.

Answer: FALSE

Explanation: Rounded to the nearest thousandth, the answer would be 183.333.

Difficulty: 3 Hard

Topic: LU 01-01 Reading, Writing, and Rounding Numbers; LU 01-03 Performing Basic Math Functions with Decimals

Learning Objective: 01-01 (2) Round numbers to the indicated position.; 01-03 (1) Add, subtract, multiply, and divide decimals.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

29) 66.69 divided by 100 equals .6669. (Use the shortcut method.)

Answer: TRUE

Explanation: Use the shortcut rule to move the decimal point two places to the left.

Difficulty: 1 Easy

Topic: LU 01-03 Performing Basic Math Functions with Decimals

Learning Objective: 01-03 (3) Multiply and divide decimals by shortcut methods.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

30) 29.41 minus .008 equals 29.402.

Answer: TRUE

Explanation: 29.41 minus .008 equals the difference of 29.402.

Difficulty: 2 Medium

Topic: LU 01-03 Performing Basic Math Functions with Decimals

Learning Objective: 01-03 (1) Add, subtract, multiply, and divide decimals.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

31) 6.33 times 7.41 = 46.9053.

Answer: TRUE

Explanation: The product of 6.33 and 7.41 equals 46.9053.

Difficulty: 3 Hard

Topic: LU 01-03 Performing Basic Math Functions with Decimals

Learning Objective: 01-03 (1) Add, subtract, multiply, and divide decimals.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

32) 5000 Mexican pesos equal about $630 in U.S. currency.



Answer: FALSE

Explanation: Apply the appropriate exchange rate to the given currency value. 5000 pesos × $.0715/peso = $357.50 OR 5000 pesos ÷ $13.9876/peso = $357.46

Difficulty: 2 Medium

Topic: LU 01-01 Reading, Writing, and Rounding Numbers; LU 01-03 Performing Basic Math Functions with Decimals

Learning Objective: 01-01 (2) Round numbers to the indicated position.; 01-03 (2) Complete decimal applications in foreign currency.

Bloom's: Analyze

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

33) The decision-making process does not involve:

A) Stating the problem

B) Deciding on the worst method to solve it

C) Seeing if the solution makes sense

D) Evaluating the end result

E) Deciding on the best method to solve it

Answer: B

Explanation: Review your notes on terminology and vocabulary related to this material.

Difficulty: 1 Easy

Topic: LU 01-01 Reading, Writing, and Rounding Numbers

Learning Objective: 01-01 (3) Dissect and solve a word problem using the blueprint aid.

Bloom's: Understand

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

34) In the number 49,869 there are how many tens?

A) 9

B) 6

C) 8

D) 4

E) 69

Answer: B

Explanation: Look at the second position from the right.

Difficulty: 1 Easy

Topic: LU 01-01 Reading, Writing, and Rounding Numbers

Learning Objective: 01-01 (1) Read and write numeric and verbal numbers using place values.

Bloom's: Understand

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

35) 9,432 written in verbal is:

A) nine thousand four hundred two

B) nine thousand and four hundred thirty-two

C) nine thousand four hundred twenty-three

D) nine thousand, four hundred thirty-two

Answer: D

Explanation: Express each digit in the number separately with its correct place value.

Difficulty: 1 Easy

Topic: LU 01-01 Reading, Writing, and Rounding Numbers

Learning Objective: 01-01 (1) Read and write numeric and verbal numbers using place values.

Bloom's: Understand

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

36) 37,855 rounded to the nearest thousand is:

A) 40,000

B) 30,000

C) 38,000

D) 37,000

Answer: C

Explanation: 7,855 is closer to 8,000 than to 7,000.

Difficulty: 1 Easy

Topic: LU 01-01 Reading, Writing, and Rounding Numbers

Learning Objective: 01-01 (2) Round numbers to the indicated position.

Bloom's: Understand

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

37) 19,810 rounded to the nearest hundred is:

A) 20,000

B) 19,000

C) 19,700

D) 19,800

Answer: D

Explanation: 810 is closer to 800 than to 900.

Difficulty: 1 Easy

Topic: LU 01-01 Reading, Writing, and Rounding Numbers

Learning Objective: 01-01 (2) Round numbers to the indicated position.

Bloom's: Understand

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

38) Round all-the-way 2,689:

A) 2,680

B) 3,680

C) 3,000

D) 2,790

Answer: C

Explanation: Digit to the right of 2 is greater than 5, so 2 becomes 3.

Difficulty: 2 Medium

Topic: LU 01-01 Reading, Writing, and Rounding Numbers

Learning Objective: 01-01 (2) Round numbers to the indicated position.

Bloom's: Understand

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

39) Adding 1,690 + 88 + 410 + 30 results in a sum of:

A) 2,182

B) 2,818

C) 2,218

D) 2,188

Answer: C

Explanation: The equation adds up to 2,218.

Difficulty: 2 Medium

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (1) Add whole numbers.

Bloom's: Understand

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

40) Subtracting 766 from 941 results in a difference of:

A) 175

B) 571

C) 185

D) 241

Answer: A

Explanation: Check your work by adding 175 and 766.

Difficulty: 2 Medium

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (2) Subtract whole numbers.

Bloom's: Understand

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

41) 88,000 times 300 equals:

A) 264,000

B) 26,000

C) 26,400,000

D) 26,000,000

Answer: C

Explanation: 3 times 88 equals 264; then place the five zeros.

Difficulty: 2 Medium

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (3) Multiply whole numbers.

Bloom's: Understand

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

42) 97 × 100,000 equals:

A) 9,700

B) 97,000

C) 9,700,000

D) 970,000

Answer: C

Explanation: 1 times 97 equals 97; now include the five zeros.

Difficulty: 2 Medium

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (3) Multiply whole numbers.

Bloom's: Understand

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

43) 98,000 divided by 4,000 equals:

A) 420

B) 240

C) 2R2

D) 24R2

Answer: D

Explanation: Cancel out the three zeros, 4 times 24 equals 96, leaving 2 extra.

Difficulty: 2 Medium

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (4) Divide whole numbers.

Bloom's: Understand

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

44) Janet Woo received the following grades in an accounting class at McClenan Community College: 65, 80, 70, 100, 75, and 90. The instructor said he would drop the lowest grade. What is Janet's average?

A) 81

B) 83

C) 84

D) 82

Answer: B

Explanation: Add the five largest values and divide that sum by 5.

Difficulty: 2 Medium

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (1) Add whole numbers.; 01-02 (4) Divide whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

45) Lee Co. carpeted its offices, requiring 310 square yards of commercial carpet. The total cost of the carpet at Home Depot was $10,230. How much did Lee pay per square yard?

A) $33

B) $34

C) $340

D) $32

Answer: A

Explanation: Take the total cost of $10,230 and divide by 310.

Difficulty: 2 Medium

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (4) Divide whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

46) At Best Buy a flat screen television with a regular price of $1,790 was reduced by $395. Assuming 800 customers purchased the television, what were the total sales to Best Buy?

A) $1,160

B) $11,160

C) $116,000

D) $1,116,000

Answer: D

Explanation: Subtract 395 from 1,790, then multiply by 800.

Difficulty: 2 Medium

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (3) Multiply whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

47) A General Electric Plant produced 12,000 jet engines in May. General Electric was able to sell 11,000 of these engines. Calculate the total ending inventory cost assuming each engine cost $290,000.

A) $1,000

B) $290,000,000

C) $2,900,000

D) $29,000,000

Answer: B

Explanation: The difference is 1,000. Multiply this by $290,000 and you get the same value with three more zeros.

Difficulty: 3 Hard

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (2) Subtract whole numbers.; 01-02 (3) Multiply whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

48) True Value Hardware buys 200 snow blowers for $90 each to stock the store for the winter. If True Value sells the 200 snow blowers at $120 each, what is the profit? (sales − cost)

A) $60,000

B) $6,000

C) $24,000

D) $18,000

Answer: B

Explanation: Find the difference between 120 and 90, which is 30, and multiply that by 200.

Difficulty: 2 Medium

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (2) Subtract whole numbers.; 01-02 (3) Multiply whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

49) On Tuesday, Pizza Hut sold 60 plain pizzas at $5 each; 20 meatball pizzas at $8 each; 25 Sicilian pizzas at $9 each; and 33 large crust supremes at $10 each. What were the total dollar sales for Pizza Hut on Tuesday?

A) $790

B) $1,015

C) $1,115

D) $1,511

Answer: B

Explanation: Multiply each item count by the item price and total those values.

Difficulty: 2 Medium

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (1) Add whole numbers.; 01-02 (3) Multiply whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

50) Pete Hax rents a ski house in Vail for $1,800 per month for six months. Assuming Pete spends $12,955 for the total trip, how much was spent above the renting of the ski house?

A) $10,800

B) $18,100

C) $2,155

D) $11,155

Answer: C

Explanation: Multiply 1,800 by 6 and subtract that value from $12,955.

Difficulty: 2 Medium

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (2) Subtract whole numbers.; 01-02 (3) Multiply whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

51) Sally Ray borrowed $38,000 to buy a new Chevy Volt. Assuming an interest charge of $4,100, what will be her monthly payment if she takes 25 months to repay the loan (including interest)? Assume the loan is repaid in equal payments.

A) $1,520

B) $1,684

C) $1,316

D) $1,536

Answer: B

Explanation: Add the amount borrowed and the interest charge and divide that total by 25.

Difficulty: 3 Hard

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (1) Add whole numbers.; 01-02 (4) Divide whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

52) Eric Rose wants to buy a Ford Explorer that costs $26,000 with an interest charge of $3,000. If there are 50 equal payments required, what will Eric's monthly payment be?

A) $580

B) $574

C) $520

D) $526

Answer: A

Explanation: Add the amount borrowed and the interest charge and divide that total by 50.

Difficulty: 3 Hard

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (1) Add whole numbers.; 01-02 (4) Divide whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

53) Ed Sloan bought 6,000 shares of stock in Ebay Co. After holding the stock for six months, he sold 500 shares on Monday, 220 shares on Tuesday and again on Thursday, and 900 shares on Friday. If the average share of stock he still has is worth $70 per share, what is the total value of the remaining shares of stock?

A) $306,600

B) $291,200

C) $423,000

D) $333,200

Answer: B

Explanation: Remaining shares → 6,000 − 500 − 220 − 220 − 900 = 4,160. Multiply that amount by 70.

Difficulty: 3 Hard

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (2) Subtract whole numbers.; 01-02 (3) Multiply whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

54) Round all-the-way 2,689:

A) 2,680

B) 3,680

C) 3,000

D) 2,790

Answer: C

Explanation: Identified digit is 2, the number to the right is five or higher so you round up to 3 and add zeros, 3,000.

Difficulty: 1 Easy

Topic: LU 01-01 Reading, Writing, and Rounding Numbers

Learning Objective: 01-01 (2) Round numbers to the indicated position.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

55) 47,000 times 400 equals:

A) 18,800,000

B) 18,000,000

C) 18,000,800

D) 800,000

Answer: A

Explanation: Align the multiplicand (top number) and multiplier (bottom number) at the right. Multiply the right digit of the multiplier with the right digit of the multiplicand. Keep multiplying as you move left through the multiplicand. Once you have finished multiplying the right digit of the multiplier, continue to move left through the multiplier as you multiply it with the multiplicand.

Difficulty: 2 Medium

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (3) Multiply whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

56) 708,000 divided by 3,000 equals:

A) 236

B) 236 R2

C) 2360

D) 23,360

Answer: A

Explanation: When the dividend and divisor have ending zeros, count the number of ending zeros in the divisor. Drop the same number of zeros in the dividend as in the divisor, counting from right to left.

Difficulty: 2 Medium

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (4) Divide whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

57) Ace Landscape buys 100 shovels for $15 each. Ace sells all 100 shovels at $29.99. What is his profit (sales − cost)?

A) $1,500

B) $2,999

C) $1,499

D) $1,400

Answer: C

Explanation: Total Cost → 100 × $15 = $1,500. Total Sales → 100 × $29.99 = $2,999. Profit → $2,999 - $1,500 = $1,499.

Difficulty: 2 Medium

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (2) Subtract whole numbers.; 01-02 (3) Multiply whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

58) Jeff wants to buy a new Ford Fusion for $24,200, with shipping costs of $800 and interest cost of $1,000. If Jeff pays in 72 equal payments, what will Jeff's monthly payment be to the nearest cent?

A) $361.11

B) $541.67

C) $433.33

D) $400.00

Answer: A

Explanation: Total Cost → $24,200 + $800 + $1,000 = $26,000. Monthly payment → $26,000/72 = $361.11.

Difficulty: 3 Hard

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (1) Add whole numbers.; 01-02 (4) Divide whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

59) A.J. Ryan bought 500 shares of Google at $364.55 per share. Assuming no commission, what did Ryan spend?

A) $86,455

B) $173,275

C) $154,820

D) $182,275

Answer: D

Explanation: Multiply the number of shares by the price of the share.

Difficulty: 1 Easy

Topic: LU 01-03 Performing Basic Math Functions with Decimals

Learning Objective: 01-03 (1) Add, subtract, multiply, and divide decimals.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

60) Pumpkins at a local farm sell for $.49 per pound. Jim Ring spent $73.50. How many pounds of pumpkins were purchased?

A) 100

B) 150

C) 154

D) 110

Answer: B

Explanation: Divide the total spent by the price per pound.

Difficulty: 2 Medium

Topic: LU 01-03 Performing Basic Math Functions with Decimals

Learning Objective: 01-03 (1) Add, subtract, multiply, and divide decimals.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

61) North Shore Community College reimburses faculty members $.298 per mile to go to a workshop. Professor Wales submitted her travel log for a total of 650.11 miles. What reimbursement can Professor Wales expect? (Round answer to the nearest cent.)

A) $193.70

B) $193.71

C) $193.72

D) $193.73

Answer: D

Explanation: Multiply the number of miles traveled by the reimbursement rate per mile.

Difficulty: 2 Medium

Topic: LU 01-01 Reading, Writing, and Rounding Numbers; LU 01-03 Performing Basic Math Functions with Decimals

Learning Objective: 01-01 (2) Round numbers to the indicated position.; 01-03 (1) Add, subtract, multiply, and divide decimals.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

62) The Weather Channel reported that normal snowfall is 138.44 inches for Lexington County. This winter the following snowfall occurred:

|  |  |  |
| --- | --- | --- |
|  |  |  |
| December | 18.46 | inches |
| January | 15.438 | inches |
| February | 18.999 | inches |
| March | 24.861 | inches |

How much was the snowfall below normal?

A) 22.682 inches

B) 23.682 inches

C) 60.682 inches

D) 77.758 inches

Answer: C

Explanation: Add the four months' snowfall totals and subtract that sum from the reported normal snowfall.

Difficulty: 2 Medium

Topic: LU 01-03 Performing Basic Math Functions with Decimals

Learning Objective: 01-03 (1) Add, subtract, multiply, and divide decimals.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

63) If Jan sells 2,500 glow sticks on the Fourth of July at $1.99 each, what will her total profit (sales – cost) be if each stick cost her $.88?

A) $2,800

B) $3,000

C) $2,775

D) $2,500

Answer: C

Explanation: Find the difference between the cost and sale price and multiply that difference by the number of glow sticks sold. OR Total Cost → 2500 × $.88 = $2,200. Total Sales → 2500 × $1.99 = $4,975. Profit → $4,975 – $2,200 = $2,775.

Difficulty: 2 Medium

Topic: LU 01-03 Performing Basic Math Functions with Decimals

Learning Objective: 01-03 (1) Add, subtract, multiply, and divide decimals.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

64) Mike Roland traveled 10,850 miles. His Ford truck averaged 16 miles per gallon. Assuming a gallon of gas cost $2.10, what was Mike's gasoline cost for the trip?

A) $1,404.06

B) $1,400.06

C) $1,402.06

D) $1,424.06

Answer: D

Explanation: Divide the total miles driven [10,850] by the number of miles per gallon [16]. Multiply that quotient by the price per gallon.

Difficulty: 2 Medium

Topic: LU 01-03 Performing Basic Math Functions with Decimals

Learning Objective: 01-03 (1) Add, subtract, multiply, and divide decimals.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

65) Jill traveled to Canada and bought a new lamp for $460 in Canadian currency. In U.S. dollars this is equivalent to: (Use the table below.)



A) $406

B) $577

C) $522

D) $481

Answer: A

Explanation: Apply the appropriate exchange rate to the given currency value and round to the nearest dollar.

460 Canadian dollars × .8817 US dollars per Canadian dollar OR 460 Canadian dollars ÷ 1.1341 Canadian dollar/US dollar

Difficulty: 2 Medium

Topic: LU 01-01 Reading, Writing, and Rounding Numbers; LU 01-03 Performing Basic Math Functions with Decimals

Learning Objective: 01-01 (2) Round numbers to the indicated position.; 01-03 (2) Complete decimal applications in foreign currency.

Bloom's: Analyze

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

01-01 Choose the item in column 2 that best matches each item in column 1.

A) Number in the division process that is being divided by another

B) Amount left over in the division process

C) The answer to a multiplication problem

D) Smaller number being subtracted from a large number

E) Bottom number in a multiplication problem

F) Minuend less subtrahend

G) Numbers combined in adding process

H) Number in the division process that is dividing into another number

I) Top number in multiplication problem

J) Larger number from which another is subtracted

K) Doesn't contain a decimal or fraction.

L) The answer to a division problem

M) The total of the adding process

66) Addend

Difficulty: 2 Medium

Topic: Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (1) Add whole numbers; 01-02 (2) Subtract whole numbers; 01-02 (3) Multiply whole numbers; 01-02 (4) Divide whole numbers

Bloom's: Remember

AACSB/Gradable: NA; automatic

67) Difference

Difficulty: 2 Medium

Topic: Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (1) Add whole numbers; 01-02 (2) Subtract whole numbers; 01-02 (3) Multiply whole numbers; 01-02 (4) Divide whole numbers

Bloom's: Remember

AACSB/Gradable: NA; automatic

68) Dividend

Difficulty: 2 Medium

Topic: Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (1) Add whole numbers; 01-02 (2) Subtract whole numbers; 01-02 (3) Multiply whole numbers; 01-02 (4) Divide whole numbers

Bloom's: Remember

AACSB/Gradable: NA; automatic

69) Divisor

Difficulty: 2 Medium

Topic: Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (1) Add whole numbers; 01-02 (2) Subtract whole numbers; 01-02 (3) Multiply whole numbers; 01-02 (4) Divide whole numbers

Bloom's: Remember

AACSB/Gradable: NA; automatic

70) Minuend

Difficulty: 2 Medium

Topic: Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (1) Add whole numbers; 01-02 (2) Subtract whole numbers; 01-02 (3) Multiply whole numbers; 01-02 (4) Divide whole numbers

Bloom's: Remember

AACSB/Gradable: NA; automatic

71) Multiplicand

Difficulty: 2 Medium

Topic: Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (1) Add whole numbers; 01-02 (2) Subtract whole numbers; 01-02 (3) Multiply whole numbers; 01-02 (4) Divide whole numbers

Bloom's: Remember

AACSB/Gradable: NA; automatic

72) Multiplier

Difficulty: 2 Medium

Topic: Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (1) Add whole numbers; 01-02 (2) Subtract whole numbers; 01-02 (3) Multiply whole numbers; 01-02 (4) Divide whole numbers

Bloom's: Remember

AACSB/Gradable: NA; automatic

73) Product

Difficulty: 2 Medium

Topic: Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (1) Add whole numbers; 01-02 (2) Subtract whole numbers; 01-02 (3) Multiply whole numbers; 01-02 (4) Divide whole numbers

Bloom's: Remember

AACSB/Gradable: NA; automatic

74) Quotient

Difficulty: 2 Medium

Topic: Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (1) Add whole numbers; 01-02 (2) Subtract whole numbers; 01-02 (3) Multiply whole numbers; 01-02 (4) Divide whole numbers

Bloom's: Remember

AACSB/Gradable: NA; automatic

75) Remainder

Difficulty: 2 Medium

Topic: Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (1) Add whole numbers; 01-02 (2) Subtract whole numbers; 01-02 (3) Multiply whole numbers; 01-02 (4) Divide whole numbers

Bloom's: Remember

AACSB/Gradable: NA; automatic

76) Subtrahend

Difficulty: 2 Medium

Topic: Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (1) Add whole numbers; 01-02 (2) Subtract whole numbers; 01-02 (3) Multiply whole numbers; 01-02 (4) Divide whole numbers

Bloom's: Remember

AACSB/Gradable: NA; automatic

77) Sum

Difficulty: 2 Medium

Topic: Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (1) Add whole numbers; 01-02 (2) Subtract whole numbers; 01-02 (3) Multiply whole numbers; 01-02 (4) Divide whole numbers

Bloom's: Remember

AACSB/Gradable: NA; automatic

78) Whole number

Difficulty: 2 Medium

Topic: Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (1) Add whole numbers; 01-02 (2) Subtract whole numbers; 01-02 (3) Multiply whole numbers; 01-02 (4) Divide whole numbers

Bloom's: Remember

AACSB/Gradable: NA; automatic

Answers: 66) G 67) F 68) A 69) H 70) J 71) I 72) E 73) C 74) L 75) B 76) D 77) M 78) K

79) Express this verbal in number form:

Twelve thousand, nine hundred fifty-three

Answer: 12953

12,953

Explanation: Express each digit in the number separately with its correct place value.

Difficulty: 1 Easy

Topic: LU 01-01 Reading, Writing, and Rounding Numbers

Learning Objective: 01-01 (1) Read and write numeric and verbal numbers using place values.

Bloom's: Understand

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

80) Round the following number to the nearest ten:

74

Answer: 70

Explanation: 74 is closer to 70 than to 80.

Difficulty: 1 Easy

Topic: LU 01-01 Reading, Writing, and Rounding Numbers

Learning Objective: 01-01 (2) Round numbers to the indicated position.

Bloom's: Understand

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

81) Round the following number to the nearest hundred:

792

Answer: 800

Explanation: 792 is closer to 800 than to 700.

Difficulty: 1 Easy

Topic: LU 01-01 Reading, Writing, and Rounding Numbers

Learning Objective: 01-01 (2) Round numbers to the indicated position.

Bloom's: Understand

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

82) Round the following number to the nearest thousand:

9,314

Answer: 9,000

9000

Explanation: 9,314 is closer to 9,000 than to 10,000.

Difficulty: 1 Easy

Topic: LU 01-01 Reading, Writing, and Rounding Numbers

Learning Objective: 01-01 (2) Round numbers to the indicated position.

Bloom's: Understand

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

83) Estimate by rounding all the way (do not round final answer):

|  |
| --- |
| 5,817 |
| +7,500 |

Answer: 14,000

14000

Explanation: (6,000 + 8,000). Rounding all the way means to round to the largest place value shown.

Difficulty: 2 Medium

Topic: LU 01-01 Reading, Writing, and Rounding Numbers; LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-01 (2) Round numbers to the indicated position.; 01-02 (1) Add whole numbers.

Bloom's: Understand

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

84) Estimate by rounding all the way (do not round final answer):

|  |
| --- |
| 8,100 |
| +7,665 |

Answer: 16,000

16000

Explanation: (8,000 + 8,000). Rounding all the way means to round to the largest place value shown.

Difficulty: 2 Medium

Topic: LU 01-01 Reading, Writing, and Rounding Numbers

Learning Objective: 01-01 (2) Round numbers to the indicated position.

Bloom's: Understand

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

85) Fill in the missing number:

|  |
| --- |
| 3,910 |
| − |
| 79 |

Answer: 3,831

3831

Explanation: Subtract the shown difference, 79, from the minuend, 3,910.

Difficulty: 1 Easy

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (2) Subtract whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

86) Fill in missing number:

|  |
| --- |
| 2,188 |
| −750 |

Answer: 1,438

1438

Explanation: 2,188 – 750 equals 1,438.

Difficulty: 1 Easy

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (2) Subtract whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

87) Multiply by shortcut method:

130 × 1,000

Answer: 130,000

130000

Explanation: 1 times 13 is 13, then attach the four zeros at the end.

Difficulty: 1 Easy

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (3) Multiply whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

88) Multiply by shortcut method:

6,150 × 10,000

Answer: 61,500,000

61500000

Explanation: Attach five zeros to 615.

Difficulty: 1 Easy

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (3) Multiply whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

89) Divide by shortcut method:

130,000 ÷ 1,000 =

Answer: 130

Explanation: Remove the three common zeros from 130,000 to get 130.

Difficulty: 1 Easy

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (4) Divide whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

90) Divide by shortcut method:

1,600 ÷ 10 =

Answer: 160

Explanation: Remove the one common zero from 1,600 to get 160.

Difficulty: 1 Easy

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (4) Divide whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

91) Divide by long division (show work):

6,644 ÷ 181

Answer: 36 R128

Explanation: 6644 divided by 181 is 36 R 128.

Difficulty: 2 Medium

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (4) Divide whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

92) Estimated by rounding A. all the way and B. do actual calculation.

6,951 ÷ 81

Answer: A. is 87 R40; B. is 85 R66

Explanation: 7,000 divided by 80 is 87 with 40 left over. 6,951 divided by 81 is 85 with 66 left over.

Difficulty: 2 Medium

Topic: LU 01-01 Reading, Writing, and Rounding Numbers; LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-01 (2) Round numbers to the indicated position.; 01-02 (4) Divide whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

93) Ray Company received a shipment of 25 cartons of stereos. In each carton were five stereos. Each stereo sells for $80 and has a $30 cost to Ray. Assuming Ray sells all the stereos, what would his profit (sales – cost) be?

Answer: $6,250

$6250

Explanation: Determine the total number of stereos by multiplying the number of cartons by the number of stereos in each carton. Find the profit for one stereo by finding the difference between the cost and the sale price. Multiply that difference by the total number of stereos to find the profit for all the stereos.

Total number of stereos: 25 × 5 = 125. Profit for one stereo: 80−30=50 Profit for all stereos: 125 × 50 = 6250.

OR

Total number of stereos: 25 × 5 = 125. Total cost: 125 × 30 = 3,750. Total sales: 125 × 80 = 10,000. Profit = 10,000 – 3,750 = 6,250.

Difficulty: 2 Medium

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (2) Subtract whole numbers.; 01-02 (3) Multiply whole numbers.

Bloom's: Analyze

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

94) Ron purchased two new Jeep Cherokees for $22,500 per Jeep. He paid $3,200 down on each car. What total amount should Ron borrow to pay for the cars?

Answer: $38,600

$38600

Explanation: Total cost for two Jeeps →22,500 x 2 = 45,000. Total down payment for two Jeeps → 3,200 × 2 = 6,400. Amount to borrow →45,000 – 6,400 = 38,600.

Difficulty: 2 Medium

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (2) Subtract whole numbers.; 01-02 (3) Multiply whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

95) John's Pizza sold $11,130 worth of pizza for one week. Each pizza sells for $6. Assuming that each day the same number of pizzas is sold, how many pizzas were sold each day? Assume a seven-day work week.

Answer: 265

Explanation: Take the total sales amount divided by the sale price to determine the number of pizzas sold during the week. Divide the result by the number of days in the week to get the number of pizzas sold each day.

Pizzas sold during the week: 11,130/6 = 1,855.

Pizzas sold each day: 1,855/7 = 265.

Difficulty: 3 Hard

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (4) Divide whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

96) Fleet Center seats 14,500 people. Last night at the Celtics game 13,280 were in attendance. Total attendance for the season was 337,500.

Assuming a 25-game home schedule, what is the average attendance per game?

If each ticket cost $18, what would a sellout bring in for revenue for a game?

Answer: Average attendance: 337,500/25 = 13,500; Revenue: 14,500 x 18 = $261,000.

Explanation: The average attendance would be the total season attendance divided by the 25 home games. The revenue for a sellout game would be the total capacity times the ticket price.

Difficulty: 2 Medium

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (3) Multiply whole numbers.; 01-02 (4) Divide whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

97) What is the total, in numeric form, of the following verbal forms?

Twelve thousand, four hundred eighty-four

Fourteen million, eight

Eleven thousand, six hundred twenty-two

Answer: 14,024,114

14024114

Explanation: 12,484 + 14,000,008 + 11,622 = 14,024,114.

Difficulty: 1 Easy

Topic: LU 01-01 Reading, Writing, and Rounding Numbers; LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-01 (1) Read and write numeric and verbal numbers using place values.; 01-02 (1) Add whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

98) Express 8,732,649 in verbal form.

A) Eight million, seven hundred thirty-two thousand, six hundred forty-nine

B) Eight million, six hundred thirty-one thousand, six hundred forty-nine

C) Eight million, seven hundred thirty-two thousand, seven hundred forty-five

D) Eight million, seven hundred twenty-two thousand, six hundred eighty-nine

Answer: A

Explanation: Express each digit in the number separately with its correct place value.

Difficulty: 1 Easy

Topic: LU 01-01 Reading, Writing, and Rounding Numbers

Learning Objective: 01-01 (1) Read and write numeric and verbal numbers using place values.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

99) Round the following number to the nearest ten:

65

Answer: 70

Explanation: The 5 in 65 forces the nearest 10 to 70.

Difficulty: 1 Easy

Topic: LU 01-01 Reading, Writing, and Rounding Numbers

Learning Objective: 01-01 (2) Round numbers to the indicated position.

Bloom's: Understand

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

100) Round the following number to the nearest hundred:

686

Answer: 700

Explanation: 686 is closer to 700 than to 600.

Difficulty: 1 Easy

Topic: LU 01-01 Reading, Writing, and Rounding Numbers

Learning Objective: 01-01 (2) Round numbers to the indicated position.

Bloom's: Understand

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

101) Round the following number to the nearest thousand:

7,108

Answer: 7,000

7000

Explanation: 7,108 is closer to 7,000 than to 8,000.

Difficulty: 1 Easy

Topic: LU 01-01 Reading, Writing, and Rounding Numbers

Learning Objective: 01-01 (2) Round numbers to the indicated position.

Bloom's: Understand

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

102) Round the following number all the way:

15,915

Answer: 20,000

20000

Explanation: The 5 in the thousands place causes the 1 in the ten thousands place to become 2. The remaining digits change to zeroes.

Difficulty: 1 Easy

Topic: LU 01-01 Reading, Writing, and Rounding Numbers

Learning Objective: 01-01 (2) Round numbers to the indicated position.

Bloom's: Understand

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

103) Estimate by rounding all the way, work actual problem, and check by adding each column of digits separately.

|  |
| --- |
| 1,905 |
| 3,755 |
| 6,939 |

Answer: A. Actual = 12,599    B. Estimate  = 13,000    C. Check = 12,599

The estimate, rounded all the way, equals 2,000 + 4,000 + 7,000. The actual resulting sum is 12,599, which is closer to 13,000 than to 12,000, as noted in the estimate.

A.

|  |  |  |
| --- | --- | --- |
|  | 1,905 |  |
|  | 3,755 |  |
|  | 6,939 |  |
|  | 12,599 |  |

B.

|  |  |  |
| --- | --- | --- |
|  | 2,000 |  |
|  | 4,000 |  |
|  | 7,000 |  |
|  | 13,000 |  |

C.

|  |  |  |
| --- | --- | --- |
|  | 19 |  |
|  | 8 |  |
|  | 25 |  |
|  | 10 |  |
|  | 12,599 |  |

Difficulty: 2 Medium

Topic: LU 01-01 Reading, Writing, and Rounding Numbers; LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-01 (2) Round numbers to the indicated position.; 01-02 (1) Add whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

104) A. Estimate by rounding all the way and B. Do actual calculation:

|  |
| --- |
| 5,218 |
| × 605 |

Answer:

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  |  | 5,000 |  |
|  | × | 600 |  |
|  |  | 3,000,000 |  |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  |  | 5,218 |  |
|  | × | 605 |  |
|  |  | 26,090 |  |
|  |  | 3 130 80 |  |
|  |  | 3,156,890 |  |

The actual answer should be close to the estimate of 3,000,000, which is the result of 5,000 × 600.

Difficulty: 2 Medium

Topic: LU 01-01 Reading, Writing, and Rounding Numbers; LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-01 (2) Round numbers to the indicated position.; 01-02 (3) Multiply whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

105) Multiply by the shortcut method:

62.951 × 1,000

Answer: 62,951

62951

Explanation: Move the decimal point three places to the right.

Difficulty: 1 Easy

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-03 (3) Multiply and divide decimals by shortcut methods.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

106) A. Divide and B. check answer by multiplication:

16,192 ÷ 58

Answer: A. 279 R10      B.  16,192

16,192 divided by 58 is 279 with 10 left over.

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | 279 *R*10 |  |
| 58 | ) | 16,514 |  |
|  |  | 116 |  |
|  |  | 459 |  |
|  |  | 406 |  |
|  |  | 532 |  |
|  |  | 522 |  |
|  |  | 10 |  |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | 279 |  |
|  | × | 58 |  |
|  |  | 2232 |  |
|  |  | 1395 |  |
|  |  | 16,182 |  |
|  | + | 10 |  |
|  |  | 16,195 |  |

Difficulty: 2 Medium

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (3) Multiply whole numbers.; 01-02 (4) Divide whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

107) Divide by the shortcut method:

1,500 ÷ 50

Answer: 30

Explanation: Discard the common zero and divide 150 by 5 to get 30.

Difficulty: 1 Easy

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (4) Divide whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

108) Peter Broom, who lives in Boston, bought a round-trip ticket to Chicago for $473. He handed the ticket agent five $100 bills. What change does Broom receive?

Answer: $27

Explanation: Multiply the five by 100 before subtracting the $473. $500 – $473 = $27.

Difficulty: 1 Easy

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (2) Subtract whole numbers.; 01-02 (3) Multiply whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

109) Earl Miller plans to buy a boat for $19,500 with an interest charge of $2,500. Earl figures he can afford a monthly payment of $650.

a. If Earl has to pay 36 equal monthly payments, can he afford the boat?

b. Calculate the monthly payment amount.

Answer:

a. Yes, he can afford the payments.

b. Earl's monthly payment would be $611.11.

Explanation: Add the amount borrowed and the interest charge and divide that total by 36 to get the monthly payment. Determine if that amount is less than $650.

$19,500 + $2,500 = $22,000.

22,000/36 = $611.11.

Difficulty: 3 Hard

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (1) Add whole numbers.; 01-02 (4) Divide whole numbers.

Bloom's: Analyze

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

110) In 2016, Peter Royan earned $66,000 in real estate commissions. If Peter's average commission was $6,000 per house, how many houses did Peter sell?

Answer: 11

Explanation: Divide Peter's total commissions by the average commission per house to calculate the number of houses sold. Using the shortcut method, remove the three common zeros and divide 66 by 6.

Difficulty: 2 Medium

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (4) Divide whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

111) Art Missan has his oil tank filled 12 times per year. He completely empties the tank before having it filled. The oil tank has a 300-gallon capacity. Assuming the price of home heating fuel is $3.00 per gallon and the tank is completely empty each time Art has it filled, what is Art's average monthly bill?

Use the following blueprint aid to dissecting a word problem to solve.

|  |  |  |  |
| --- | --- | --- | --- |
| **The facts** | **Solving for** | **Steps to take** | **Key points** |
| Oil filled 12 times per year Tank holds 300 gal $3 per gallon | Average monthly heating bill | Total gallons used times cost per gallon equals total cost of oil | Average monthly bill is total cost divided by 12 months in a year |

Answer: $900

Explanation: Steps

1. Calculate total gallons used 300 × 12 = 3,600.

2. Calculate total cost of oil 3,600 gal. × $3 = $10,800.

3. Calculate average monthly bill $10,800/12 = $900.

Difficulty: 3 Hard

Topic: LU 01-01 Reading, Writing, and Rounding Numbers; LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-01 (3) Dissect and solve a word problem using the blueprint aid.; 01-02 (3) Multiply whole numbers.; 01-02 (4) Divide whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

112) Express eighteen thousand, one hundred sixty-five in number form.

Answer: 18,165

18165

Explanation: Express each digit in the number separately with its correct place value.

Difficulty: 1 Easy

Topic: LU 01-01 Reading, Writing, and Rounding Numbers

Learning Objective: 01-01 (1) Read and write numeric and verbal numbers using place values.

Bloom's: Understand

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

113) Express thirty-eight thousand, five hundred three in number form:

Answer: 38,503

38503

Explanation: Express each digit in the number separately with its correct place value.

Difficulty: 1 Easy

Topic: LU 01-01 Reading, Writing, and Rounding Numbers

Learning Objective: 01-01 (1) Read and write numeric and verbal numbers using place values.

Bloom's: Understand

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

114) Round the following number to the nearest ten:

52

Answer: 50

Explanation: 52 is closer to 50 than to 60.

Difficulty: 2 Medium

Topic: LU 01-01 Reading, Writing, and Rounding Numbers

Learning Objective: 01-01 (2) Round numbers to the indicated position.

Bloom's: Understand

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

115) Round the following number to the nearest hundred:

491

Answer: 500

Explanation: 491 is closer to 500 than to 400.

Difficulty: 2 Medium

Topic: LU 01-01 Reading, Writing, and Rounding Numbers

Learning Objective: 01-01 (2) Round numbers to the indicated position.

Bloom's: Understand

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

116) Round the following number to the nearest thousand:

9,333

Answer: 9,000

9000

Explanation: 9,333 is closer to 9,000 than to 10,000.

Difficulty: 2 Medium

Topic: LU 01-01 Reading, Writing, and Rounding Numbers

Learning Objective: 01-01 (2) Round numbers to the indicated position.

Bloom's: Understand

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

117) Round the following number to the nearest ten:

84

Answer: 80

Explanation: 84 is closer to 80 than to 90.

Difficulty: 2 Medium

Topic: LU 01-01 Reading, Writing, and Rounding Numbers

Learning Objective: 01-01 (2) Round numbers to the indicated position.

Bloom's: Understand

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

118) Round the following number to the nearest hundred:

671

Answer: 700

Explanation: 671 is closer to 700 than to 600.

Difficulty: 2 Medium

Topic: LU 01-01 Reading, Writing, and Rounding Numbers

Learning Objective: 01-01 (2) Round numbers to the indicated position.

Bloom's: Understand

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

119) Round the following number to the nearest thousand:

6,752

Answer: 7,000

7000

Explanation: 6,752 is closer to 7,000 than to 6,000.

Difficulty: 2 Medium

Topic: LU 01-01 Reading, Writing, and Rounding Numbers

Learning Objective: 01-01 (2) Round numbers to the indicated position.

Bloom's: Understand

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

120) Estimate by rounding all the way (do not round final answer):

|  |
| --- |
| 4,918 |
| +6,500 |

Answer: 12,000

12000

Explanation: 4,918 rounds to 5,000 and 6,500 rounds to 7,000 because of the 5 in the hundreds place. 5,000 + 7,000 = 12,000.

Difficulty: 2 Medium

Topic: LU 01-01 Reading, Writing, and Rounding Numbers; LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-01 (2) Round numbers to the indicated position.; 01-02 (1) Add whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

121) Estimate by rounding all the way (do not round final answer);

|  |
| --- |
| 9,100 |
| +8,555 |

Answer: 18,000

18000

Explanation: 9,100 rounds to 9,000, and 8,555 rounds to 9,000. This adds up to 18,000.

Difficulty: 2 Medium

Topic: LU 01-01 Reading, Writing, and Rounding Numbers; LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-01 (2) Round numbers to the indicated position.; 01-02 (1) Add whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

122) Estimate by rounding all the way (do not round final answer):

|  |
| --- |
| 3,342 |
| +9,581 |

Answer: 13,000

13000

Explanation: 3,342 rounds to 3,000, and 9,581 rounds to 10,000. This adds up to 13,000.

Difficulty: 2 Medium

Topic: LU 01-01 Reading, Writing, and Rounding Numbers; LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-01 (2) Round numbers to the indicated position.; 01-02 (1) Add whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

123) Estimate by rounding all the way (do not round final answer):

|  |
| --- |
| 2,944 |
| +7,653 |

Answer: 11,000

11000

Explanation: 2,944 rounds to 3,000 and 7,653 rounds to 8,000. This adds to 11,000.

Difficulty: 2 Medium

Topic: LU 01-01 Reading, Writing, and Rounding Numbers; LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (1) Add whole numbers.; 01-02 (2) Subtract whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

124) Fill in the missing number:

|  |
| --- |
| 2,950 |
| − |
| 69 |

Answer: 2,881

2881

Explanation: Subtract 69 from 2,950.

Difficulty: 1 Easy

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (2) Subtract whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

125) Fill in the missing number:

|  |
| --- |
| 1,950 |
| −890 |

Answer: 1,060

1060

Explanation: The difference from subtracting 890 from 1,950 is 1,060.

Difficulty: 1 Easy

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (2) Subtract whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

126) Fill in the missing number:

|  |
| --- |
| 1,095 |
| − |
| 39 |

Answer: 1,056

1056

Explanation: Subtract 39 from 1,095.

Difficulty: 1 Easy

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (2) Subtract whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

127) Fill in the missing number:

|  |
| --- |
| 9,438 |
| −8,888 |

Answer: 550

Explanation: 9,438 minus 8,888 is 550.

Difficulty: 1 Easy

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (2) Subtract whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

128) Multiply by shortcut method:

115 × 1,000

Answer: 115,000

115000

Explanation: Attach three zeros to 115.

Difficulty: 1 Easy

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (3) Multiply whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

129) Multiply by shortcut method:

1,815 × 10,000

Answer: 18,150,000

18150000

Explanation: Attach four zeros to 1,815.

Difficulty: 1 Easy

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (3) Multiply whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

130) Multiply by shortcut method:

525 × 1,000,000

Answer: 525,000,000

525000000

Explanation: Attach six zeros to 525.

Difficulty: 1 Easy

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (3) Multiply whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

131) Multiply by shortcut method.

1,650 × 10,000

Answer: 16,500,000

16500000

Explanation: Attach four zeros to 1,650.

Difficulty: 1 Easy

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (3) Multiply whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

132) Divide by shortcut method:

160,000 ÷ 1,000

Answer: 160

Explanation: Remove three zeros from 160,000.

Difficulty: 2 Medium

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (4) Divide whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

133) Divide by shortcut method:

190,000 ÷ 10,000

Answer: 19

Explanation: Remove four zeros from 190,000.

Difficulty: 2 Medium

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (4) Divide whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

134) Divide by shortcut method:

180,000 ÷ 100

Answer: 1,800

1800

Explanation: Remove two zeros from 180,000.

Difficulty: 2 Medium

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (4) Divide whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

135) Divide by shortcut method:

165,000 ÷ 1,000

Answer: 165

Explanation: Remove three zeros from 165,000.

Difficulty: 2 Medium

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (4) Divide whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

136) Divide by long division:

6,514 ÷ 191

Answer: 6,514 divided by 191 equals 34 with a remainder of 20.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | |  | 34 R20 | | |  |
| 191 | | ) | 6,514 | | |  |
|  | |  | 5 73 | | |  |
|  | |  | 784 | | |  |
|  | |  | 764 | | |  |
|  | |  | 20 | | |  |
|  |  | | |  |
|  | 191 | | |  |
| × | 34 | | |  |
|  | 764 | | |  |
|  | 5 73 | | |  |
|  | 6,494 | | |  |
| + | 20 | | |  |
|  | 6,514 | | |  |

Difficulty: 3 Hard

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (4) Divide whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

137) Divide by long division:

6,438 ÷ 132

Answer: 6,438 divided by 132 equals 48 with a remainder of 102.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | |  | 48 R102 | | |  |
| 132 | | ) | 6,438 | | |  |
|  | |  | 528 | | |  |
|  | |  | 1158 | | |  |
|  | |  | 1056 | | |  |
|  | |  | 102 | | |  |
|  |  | | |  |
|  | 132 | | |  |
| × | 48 | | |  |
|  | 1,056 | | |  |
|  | 5 28 | | |  |
|  | 6,336 | | |  |
| + | 102 | | |  |
|  | 6,438 | | |  |

Difficulty: 3 Hard

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (4) Divide whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

138) Divide by long division:

5,652 ÷ 17

Answer: Estimate by dividing 6,000 by 20. 5,652 divided by 17 equals 332 with a remainder of 8.

A.

|  |  |  |
| --- | --- | --- |
|  |  | 300 |
| 20 | ) | 6,000 |

B.

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | 332*R*8 |  |
| 17 | ) | 5,652 |  |
|  |  | 5 1 |  |
|  |  | 55 |  |
|  |  | 51 |  |
|  |  | 42 |  |
|  |  | 34 |  |
|  |  | 8 |  |

Difficulty: 3 Hard

Topic: LU 01-01 Reading, Writing, and Rounding Numbers; LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-01 (2) Round numbers to the indicated position.; 01-02 (4) Divide whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

139) Divide by long division:

8,241 ÷ 12

Answer: Estimate by dividing 8,000 by 10. 8,241 divided by 12 equals 686 with a remainder of 9.

A.

|  |  |  |
| --- | --- | --- |
|  |  | 800 |
| 10 | ) | 8,000 |

B.

|  |  |  |
| --- | --- | --- |
|  |  | 686*R*9 |
| 12 | ) | 8,241 |
|  |  | 72 |
|  |  | 104 |
|  |  | 96 |
|  |  | 81 |
|  |  | 72 |
|  |  | 9 |

Difficulty: 3 Hard

Topic: LU 01-01 Reading, Writing, and Rounding Numbers; LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-01 (2) Round numbers to the indicated position.; 01-02 (4) Divide whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

140) Regan College had 30 teachers in the Business Department on January 1, 2017. During the year, 18 more teachers were hired. Five of the old teachers have retired. What is the total number of teachers currently employed in the Business Department at Regan College?

Answer: 43

Explanation: Find the total number by adding 30 to the number hired and then subtracting the number who retired. 30 + 18 → 48 – 5 = 43 teachers.

Difficulty: 1 Easy

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (1) Add whole numbers.; 01-02 (2) Subtract whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

141) Al Flow rents a luxurious condominium for $14,004 for six months. What is the rental charge per month that Al pays?

Answer: $2,334

$2334

Explanation: Take the total rental cost and divide by 6.

Difficulty: 2 Medium

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (4) Divide whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

142) Abe Real Estate is developing 15 solar homes per state in 25 states. If the cost of each home is estimated at $80,000, what is the projected cost for the entire development?

Answer: $30,000,000

$30000000

Explanation: Find the total number of homes by multiplying the number of homes per state by the number of states in the project [25 × 15 = 375]. Then multiply that total by the estimated cost to build each home [375 × 80,000].

Difficulty: 2 Medium

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (3) Multiply whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

143) Al Flynn wants to buy a van that costs $16,000 with an interest charge of $2,000. Al figures he can afford a monthly payment of $700 per month.

a. If there are 24 equal payments required, can Al afford the van?

b. Calculate the monthly payment amount.

Answer: a. No, Al cannot afford the van, which costs $50 per month too much.

b. $750

Explanation: Add the amount borrowed and the interest charge and divide that total by 24 [$18,000 ÷ 24 = $750]. Determine if that amount is less than $700.

Difficulty: 3 Hard

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (4) Divide whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

144) Al's Hardware buys 200 lawn mowers for $50 each to stock the store for spring. If Al sells the 200 lawn mowers at $80 each, what is his profit? (sales – cost)

Answer: $6,000

$6000

Explanation: Find the difference between the purchase price and the sales price and multiply by the number purchased [(80 − 50) × 200].

OR

|  |  |  |
| --- | --- | --- |
| 200 × $80 = | $ | 16,000 |
| 200 × $50 = |  | 10,000 |
| Profit | $ | 6,000 |

Difficulty: 2 Medium

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (2) Subtract whole numbers.; 01-02 (3) Multiply whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

145) A pocket calculator has a retail selling price of $12. The price has been reduced to $7. Bill purchases a calculator, handing the clerk a $100 bill. What change does Bill receive?

Answer: $93

Explanation: The original selling price is irrelevant. Subtract the sales price from the amount handed to the clerk [$100 – $7].

Difficulty: 1 Easy

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (2) Subtract whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

146) Mary Ross drove 1,064 miles and used 28 gallons of gasoline. How many miles per gallon did Mary's car get?

Answer: 38

Explanation: Divide the total miles driven by the number of gallons used [$1,064 ÷ 28].

Difficulty: 2 Medium

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (4) Divide whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

147) John Sullivan earned $101,250 selling real estate in 2016. If his average commission was $3,750 per unit sold, how many pieces of property did John sell?

Answer: 27

Explanation: Divide the total commission earnings by the average commission per unit to get the number of properties sold [$101,250 ÷ $3,750].

Difficulty: 2 Medium

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (4) Divide whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

148) Al Ring, Martha Wright, and Jim Brewer wrote a text called *Principles of Math*. The royalties on the book are to be split equally. Total royalties earned for the year are $9,936. How much is author each entitled to?

Answer: 3,312

3312

Explanation: Divide the total royalties earned by the number of authors [$9,936 ÷ 3].

Difficulty: 1 Easy

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (4) Divide whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

149) The oil tank of Bev O' Callahan's home is filled 12 times per year. She uses all the oil before having the tank filled. The oil tank has a capacity of 144 gallons. Assuming the price of home heating fuel is $2 per gallon, how much did Bev spend on oil heat for the year? What is the average monthly heating bill?

Answer: $3,456 for the year

$288 per month

Explanation: Multiply the tank capacity by the number of times it is filled [144 × 12 = 1,728 gallons] and by the price per gallon [1,728 × 2 = $3,456 for the year]. Divide that final product by the number of months in a year [$3,456 ÷ 12 months].

Difficulty: 3 Hard

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (3) Multiply whole numbers.; 01-02 (4) Divide whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

150) The Missouri State Prison saw an increase in visitors from 3,290 in 2015 to 17,200 in 2017. How many more visitors did they see in 2017?

Answer: 13,910

13910

Explanation: 17,200 – 3,290 = 13,910.

Difficulty: 1 Easy

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (2) Subtract whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

151) Tom traveled with his son Jeff to Branford, CT, by car and flew back at a cost of $443. He handed the ticket agent a $1,000 traveler's check. How much will Tom get back?

Answer: $557

Explanation: $1,000 – 443 = $557.

Difficulty: 1 Easy

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (2) Subtract whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

152) Round the following number to the nearest hundred:

18,932

Answer: 18,900

18900

Explanation: The digit to the right of 9 is less than 5. Therefore, you do not change the identified digit (9) and you change all digits to the right of the rounded identified digit to zeros.

Difficulty: 2 Medium

Topic: LU 01-01 Reading, Writing, and Rounding Numbers

Learning Objective: 01-01 (2) Round numbers to the indicated position.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

153) The price of gas is $3.59 per gallon in Florida, well below the average price in California of $4.37 per gallon. If your Ford Taurus has a 20-gallon tank, assuming you are on empty, how much more will you pay for gas in California? **(Round your answer to the nearest cent.)**

Answer: $15.60

Explanation: $4.37 – 3.59 = .78 cents; (.78 × 20) = $15.60; OR California cost ($4.37 × 20 = $87.40); Florida cost ($3.59 × 20 = $71.80); Difference $87.40 − $71.80 = $15.60.

Difficulty: 2 Medium

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (2) Subtract whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

154) Katy purchased 100 shares of Facebook stock during its initial public offering for $38.00 a share. One year later, she sold it all for $50 a share. What was her total gain?

Answer: $1,200

$1200

Explanation: $38 × 100 = $3,800 total paid; receipts from sale = $50 × 100 = $5,000; 5,000 − 3,800 = $1,200 gain.

Difficulty: 2 Medium

Topic: LU 01-02 Performing Basic Math Functions with Whole Numbers

Learning Objective: 01-02 (2) Subtract whole numbers.; 01-02 (3) Multiply whole numbers.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

155) Multiply (round solution to the nearest hundredth):

9.158 × 14.382

Answer: 131.71

Explanation: 9.158 multiplied by 14.382 equals 131.710. The zero cannot cause the 1 to be rounded up, so the answer is 131.71.

Difficulty: 2 Medium

Topic: LU 01-03 Performing Basic Math Functions with Decimals

Learning Objective: 01-01 (2) Round numbers to the indicated position.; 01-03 (1) Add, subtract, multiply, and divide decimals.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

156) Divide (round to the nearest tenth):

118,000 ÷ 3.95

Answer: 29,873.4

29873.4

Explanation: 118,000 divided by 3.95 equals 29,873.41. The 1 cannot cause the 4 to be rounded up, so the answer is 29,873.4.

Difficulty: 1 Easy

Topic: LU 01-03 Performing Basic Math Functions with Decimals

Learning Objective: 01-01 (2) Round numbers to the indicated position.; 01-03 (1) Add, subtract, multiply, and divide decimals.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

157) Complete by shortcut method:

43.81 × 1,000

Answer: 43,810

43810

Explanation: Because 1,000 has three zeros, you move the decimal point three places to the right.

Difficulty: 1 Easy

Topic: LU 01-03 Performing Basic Math Functions with Decimals

Learning Objective: 01-03 (2) Complete decimal applications in foreign currency.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

158) Complete by shortcut method:

11,896.413 × 1,000

Answer: 11,896,413

11896413

Explanation: Because 1,000 has three zeros, you move the decimal point three places to the right.

Difficulty: 1 Easy

Topic: LU 01-03 Performing Basic Math Functions with Decimals

Learning Objective: 01-03 (2) Complete decimal applications in foreign currency.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

159) Complete by shortcut method: **(Round your answer to the nearest hundred thousandth.)**

3,069.44 ÷ 1,000

Answer: 3.06944

Explanation: Because 1,000 has three zeros, you move the decimal point three places to the left.

Difficulty: 1 Easy

Topic: LU 01-03 Performing Basic Math Functions with Decimals

Learning Objective: 01-03 (2) Complete decimal applications in foreign currency.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

160) Mel Doane is taking his office staff out to lunch. He has left on his credit card a spending limit of $99.50.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |
|  | Appetizers |  |  |  |  |
|  | Fruitcup |  | $ | 1.85 |  |
|  | Onion soup |  |  | 2.95 |  |
|  |  |  |  |  |  |
|  | Entrees |  |  |  |  |
|  | Roast Beef |  | $ | 11.95 |  |
|  | Veal |  |  | 10.45 |  |
|  | Haddock |  |  | 14.50 |  |
|  |  |  |  |  |  |
|  | Beverage |  |  |  |  |
|  | Coffee |  |  | .95 |  |
|  | Soft Drinks |  |  | 1.50 |  |

a. If the total meal includes two fruit cups, two onion soups, two veal, two roast beef, three coffees, and one soft drink, will Mel be able to use the card? (Disregard tip plus tax.)

b. If so, how much more charging will Mel be allowed before hitting his credit limit? (Round your answer to the nearest cent.)

Answer:

a. Yes, Mel can use his credit card to pay for lunch.

b. $40.75

Explanation: Subtract the cost of each menu item from Doane's available credit. 99.50 – 1.85 – 1.85 – 2.95 – 2.95 – 11.95 – 11.95 – 10.45 – 10.45 – .95 – .95 – .95 – 1.50 equals 40.75. He has $40.75 left to charge.

Difficulty: 2 Medium

Topic: LU 01-03 Performing Basic Math Functions with Decimals

Learning Objective: 01-03 (1) Add, subtract, multiply, and divide decimals.

Bloom's: Analyze

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

161) Total the following: **(Round your answer to the nearest thousandth.)**

Six hundred sixty-eight and eight hundred one thousandths

Twelve and forty-nine hundredths

Three and four thousandths

Fifty-one hundredths

Three hundred ten and four tenths

Answer: 995.205

Explanation: Write the expressed values vertically in decimal form, aligning the values on the decimal positions, and then add.

|  |  |  |
| --- | --- | --- |
|  |  |  |
|  | 668.801 |  |
|  | 12.490 |  |
|  | 3.004 |  |
|  | .510 |  |
|  | 31 0.400 |  |
|  | 995.205 |  |

Difficulty: 1 Easy

Topic: LU 01-01 Reading, Writing, and Rounding Numbers; LU 01-03 Performing Basic Math Functions with Decimals

Learning Objective: 01-01 (1) Read and write numeric and verbal numbers using place values.; 01-03 (1) Add, subtract, multiply, and divide decimals.

Bloom's: Understand

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

162) Professor Burns attended a computer seminar at IBM. The college reimburses Professor Burns at $.41 per mile. Professor Burns traveled 520.4 miles. What will the college pay Professor Burns? (Round to the nearest cent.)

Answer: $213.36

Explanation: 520.4 multiplied by .41 equals 213.36 when rounded to the hundredths place.

Difficulty: 2 Medium

Topic: LU 01-03 Performing Basic Math Functions with Decimals

Learning Objective: 01-03 (1) Add, subtract, multiply, and divide decimals.

Bloom's: Analyze

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

163) Pete Smith bought two new car tires from Firestone for $89.95 per tire. Firestone charged Pete $3.25 per tire for mounting, $2.60 per tire for valves, and $3.80 per tire for balancing. What is Pete's final bill? **(Round your answer to the nearest cent.)**

Answer: $199.20

Explanation: Multiply each value by 2, vertically write the products so the decimal places align, and add the values.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 2 × | $89.95 | = | $ | 179.90 |  | tires |
| 2 × | $ 9.65 | = |  | 19.30 |  | other costs ($3.25 + 2.60 + 3.80) |
|  |  |  |  | 199.20 |  |  |

Difficulty: 2 Medium

Topic: LU 01-03 Performing Basic Math Functions with Decimals

Learning Objective: 01-03 (1) Add, subtract, multiply, and divide decimals.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

164) Multiply (round solution to the nearest hundredth):

8.143 × 13.281

Answer: 108.15

Explanation: Align the values to the right before multiplying. The result, 108.147183, is rounded to 108.15 as the 7 rounds the 4 up to 5.

|  |  |  |
| --- | --- | --- |
|  |  |  |
|  | 13.281 |  |
|  | 8.143 |  |
|  | 39843 |  |
|  | 53124 |  |
|  | 13281 |  |
|  | 106248 |  |
|  | 108.147183 |  |

Difficulty: 2 Medium

Topic: LU 01-03 Performing Basic Math Functions with Decimals

Learning Objective: 01-03 (1) Add, subtract, multiply, and divide decimals.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

165) Larry Hess bought a camera in Japan for 33,000 yen. Larry learned a yen was worth $.008446 the day of his purchase. That means one dollar was equivalent to 118.40 yen. What is the price of the camera in U.S. dollars? (Round to the nearest dollar.)

Answer: $279

Explanation: *Apply the appropriate exchange rate to the given currency value.*

33,000 yen × $.008446/yen = $278.72 OR 33,000 yen ÷ 118.4 yen/dollar = $278.72

Difficulty: 2 Medium

Topic: LU 01-01 Reading, Writing, and Rounding Numbers; LU 01-03 Performing Basic Math Functions with Decimals

Learning Objective: 01-01 (2) Round numbers to the indicated position.; 01-03 (2) Complete decimal applications in foreign currency.

Bloom's: Analyze

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

166) Rene Rodrigues vacationed in Mexico and spent 9,200 pesos. During her visit, a peso was worth $.0715. That means one dollar was equivalent to 13.9876 pesos. What was Rene's vacation spending in U.S. dollars? (Round to the nearest dollar.)

Answer: $658

Explanation: *Apply the appropriate exchange rate to the given currency value.*

9,200 pesos × $.0715/peso = $657.80 OR 9,200 pesos ÷ 13.9876 pesos/dollar = $657.73

Difficulty: 2 Medium

Topic: LU 01-01 Reading, Writing, and Rounding Numbers; LU 01-03 Performing Basic Math Functions with Decimals

Learning Objective: 01-01 (2) Round numbers to the indicated position.; 01-03 (2) Complete decimal applications in foreign currency.

Bloom's: Analyze

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation

167) Rachel and Jon's checking account balance was $3,185.66 when Rachel made two deposits that totaled $1,045.98. Jon later wrote a check but did not record the amount. The account balance is currently $2,085.76. Assuming no other deposits, withdrawals or checks, determine the amount of the check Jon wrote. **(Round your answer to the nearest cent.)**

Answer: $2,145.88

$2145.88

Explanation:

|  |
| --- |
| 4,231.64 |
| − |
| 2,085.76 |

$4,231.64. is the account balance after the deposit. Subtract the current balance (known difference) from the balance after the deposit (minuend) to determine the amount of the check.

Difficulty: 2 Medium

Topic: LU 01-03 Performing Basic Math Functions with Decimals

Learning Objective: 01-03 (1) Add, subtract, multiply, and divide decimals.

Bloom's: Apply

AACSB/Gradable: NA; automatic

Accessibility: Keyboard Navigation