# Giangrasso, *Dosage Calculations: A Multi-Method Approach*, 2/e Test Bank Chapter 1 Review of Arithmetic for Dosage Calculations

**Question 1**

**Type:** MCSA

Write the following as a mixed number: 17/4.

**1.** 4 1/4

**2.** 4

**3.** 64

**4.** 20

**Correct Answer:** 1

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Divide the numerator by the denominator or 17÷4 = 4 with 1 left over so the answer is 4 with the 1 remainder over 4 or ¼

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.1 Reduce and build fractions into equivalent forms.

**Question 2**

**Type:** MCSA

Write the following as a mixed number: 36/7.

**1.** 4 6/7

**2.** 5 1/7

**3.** 4 1/7

**4.** 5

**Correct Answer:** 2

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Divide the numerator by the denominator: 36÷7 = 5 with a remainder of 1 or 5 1/7

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.1 Reduce and build fractions into equivalent forms.

**Question 3**

**Type:** MCSA

Write the following as a mixed number: 7/2.

**1.** 4 1/2

**2.** 5 1/2

**3.** 3 1/2

**4.** 3

**Correct Answer:** 3

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Divide the numerator by the denominator: 7÷2= 3 with 1 remaining or 3 1/2

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.1 Reduce and build fractions into equivalent forms.

**Question 4**

**Type:** MCSA

Write the following number as an improper fraction: 8 5/6.

**1.** 53/6

**2.** 40/6

**3.** 53/8

**4.** 45/6

**Correct Answer:** 1

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Multiply the whole number by the denominator, and add the numerator. 8×6 = 48+5= 53. Place this number over the denominator or 53/6

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.1 Reduce and build fractions into equivalent forms.

**Question 5**

**Type:** MCSA

Write the following number as an improper fraction: 5 5/6.

**1.** 35/6

**2.** 30/6

**3.** 25/6

**4.** 41/6

**Correct Answer:** 1

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Multiply the whole number by the denominator and add the numerator: 5 × 6 =30 + 5 = 35. Place this number over the denominator: 35/6

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.1 Reduce and build fractions into equivalent forms.

**Question 6**

**Type:** MCSA

Write the following number as an improper fraction: 8 1/3.

**1.** 11/3

**2.** 24/3

**3.** 8/3

**4.** 25/3

**Correct Answer:** 4

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Multiply the whole number by the denominator and add the numerator: 8×3=24 +1 =25 Place this number over the denominator: 25/3

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.1 Reduce and build fractions into equivalent forms.

**Question 7**

**Type:** MCSA

Write 0.125 as a fraction in lowest terms and as a percentage.

**1.** 125/100; 1.25%

**2.** 25/100; 25%

**3.** 1/6; 12.5%

**4.** 1/8; 12.5%

**Correct Answer:** 4

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Write one hundred twenty-five thousandths as 125/1000, and then reduce the fraction to 1/8. Move the decimal two places to the right yielding 12.5%

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.4 Convert between decimal numbers and fractions.

**Question 8**

**Type:** MCSA

Write 0.2 as a fraction in lowest terms and as a percentage.

**1.** 1/50; 2%

**2.** 1/5; 20%

**3.** 2/100; 0.2%

**4.** 1/500; 0.002%

**Correct Answer:** 2

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Write 2 tenths as 2/10 and reduce to 1/5. Move the decimal point 2 places to the right yielding 20%

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.4 Convert between decimal numbers and fractions.

**Question 9**

**Type:** MCSA

Write 0.49 as a fraction in lowest terms and as a percentage.

**1.** 49/100; 49%

**2.** 7/15; 49%

**3.** 49/100; 4.9%

**4.** ½; 4.9%

**Correct Answer:** 1

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Write 0.49 as 49/100 which cannot be reduced further. Move the decimal point 2 places to the right to yield 49%

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.4 Convert between decimal numbers and fractions.

**Question 10**

**Type:** MCSA

Write 0.75 as a fraction in lowest terms and as a percentage.

**1.** 75/100; 75%

**2.** 15/20; 7.5%

**3.** 15/20; 75%

**4.** ¾; 75%

**Correct Answer:** 4

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Write 0.75 as 75/100 and reduce to ¾. Move the decimal point 2 places to the right to yield 75%

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.4 Convert between decimal numbers and fractions.

**Question 11**

**Type:** MCSA

Write 0.06 as a fraction in lowest terms and as a percentage.

**1.** 3/50; 60%

**2.** 6/10; 6%

**3.** 3/50; 6%

**4.** 3/5; 6%

**Correct Answer:** 3

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Write 0.06 as 6/100 and reduce to 3/50. Move the decimal point 2 places to the right to yield 6%.

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.4 Convert between decimal numbers and fractions.

**Question 12**

**Type:** MCSA

Write 55% as a decimal number and a proper fraction in lowest terms.

**1.** 5.5; 55/100

**2.** 0.055; 55/1000

**3.** 0.55; 11/20

**4.** 0.0055; 11/200

**Correct Answer:** 3

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Move the decimal 2 places to the left or 0.55, place 55 over 100 and reduce to 11/20

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.7 Write percentages as decimal numbers and fractions.

**Question 13**

**Type:** MCSA

Write 72% as a decimal number and a proper fraction in lowest terms.

**1.** 7.2; 72/1000

**2.** 7.2; 72/100

**3.** 0.72; 36/50

**4.** 0.72; 18/25

**Correct Answer:** 4

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Move the decimal 2 places to the left or 0.72. Place 72 over 100 and reduce to 18/25

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.7 Write percentages as decimal numbers and fractions.

**Question 14**

**Type:** MCSA

Write 0.6% as a decimal number and a proper fraction in lowest terms.

**1.** 3/50; 0.06

**2.** 6/100; 0.60

**3.** 1/17; 0.06

**4.** 3/500; 0.006

**Correct Answer:** 4

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Move the decimal 2 places to the left or 0.006, place 6 over 1000 and reduce to 3/500

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.7 Write percentages as decimal numbers and fractions.

**Question 15**

**Type:** MCSA

Write 4.5% as a decimal number and a proper fraction in lowest terms.

**1.** 0.45; 45/100

**2.** 0.045; 9/200

**3.** 0.0045; 45/10,000

**4.** 0.045; 45/1,000

**Correct Answer:** 2

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Move the decimal 2 places to the left or 0.045, place 45 over 1000 and reduce to 9/200

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.7 Write percentages as decimal numbers and fractions.

**Question 16**

**Type:** MCSA

Write 25% as a decimal number and a proper fraction in lowest terms.

**1.** 2.5; 1/40

**2.** 0.025; 5/200

**3.** 0.25; 1/4

**4.** 0.25; 25/100

**Correct Answer:** 3

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Move the decimal 2 places to the left or 0.25, place 25 over 100 and reduce to 1/4

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.7 Write percentages as decimal numbers and fractions.

**Question 17**

**Type:** MCSA

Write 3/5 as a decimal number and a percent.

**1.** 0.0166; 1.66%

**2.** 0.6; 60%

**3.** 0.15; 15%

**4.** 0.3; 30%

**Correct Answer:** 2

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Divide the denominator into the numerator: 3÷5 = 0.6. Move the decimal point two places to the right yielding 60%

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.2 Add, subtract, multiply, and divide fractions. 1.8 Find the percent of a number and the percent of change.

**Question 18**

**Type:** MCSA

Convert 5/8 to a decimal number and a percent.

**1.** 1.6; 160%

**2.** 0.4; 40%

**3.** 0.625; 62.5%

**4.** 0.45; 45%

**Correct Answer:** 3

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Dividing the denominator into the numerator: 5÷8=0.625. Move the decimal point two places to the right yielding 62.5%

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.2 Add, subtract, multiply, and divide fractions. 1.8 Find the percent of a number and the percent of change.

**Question 19**

**Type:** MCSA

Convert 9/19 to a decimal number rounded off to the nearest tenth, and to a percentage rounded off to the nearest tenth of a percent.

**1.** 0.5; 47.4%

**2.** 0.47; 4.8%

**3.** 0.02; 2.1%

**4.** 0.4; 47.4%

**Correct Answer:** 1

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Divide the denominator into the numerator. 9÷19 = 0.4736… rounded off to 0.5. Move the decimal point two places to the right yielding 47.4%

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.2 Add, subtract, multiply, and divide fractions. 1.8 Find the percent of a number and the percent of change.

**Question 20**

**Type:** MCSA

Write 3/5 as a decimal number and a percent.

**1.** 1.67; 167%

**2.** 0.6; 60%

**3.** 0.167; 16.7%

**4.** 0.06; 6%

**Correct Answer:** 2

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:**

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.2 Add, subtract, multiply, and divide fractions. 1.8 Find the percent of a number and the percent of change.

**Question 21**

**Type:** MCSA

Reduce 36/48 to lowest terms.

**1.** 12/18

**2.** 18/24

**3.** 9/12

**4.** 3/4

**Correct Answer:** 4

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Divide numerator and denominator by 12 yielding 3/4.

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.1 Reduce and build fractions into equivalent forms.

**Question 22**

**Type:** MCSA

Reduce 95/100 to lowest terms.

**1.** 4/5

**2.** 19/20

**3.** 24/25

**4.** 9.5/10

**Correct Answer:** 2

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Divide numerator and denominator by 5 yielding 19/20.

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.1 Reduce and build fractions into equivalent forms.

**Question 23**

**Type:** MCSA

Reduce 24/36 to lowest terms.

**1.** 12/18

**2.** 3/4

**3.** 2/3

**4.** 6/9

**Correct Answer:** 3

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Divide numerator and denominator by 12 yielding 2/3.

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.1 Reduce and build fractions into equivalent forms.

**Question 24**

**Type:** MCSA

Reduce the ratio 18:54 to a fraction in lowest terms.

**1.** 18/54

**2.** 1/3

**3.** 3/4

**4.** 1/2

**Correct Answer:** 2

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Convert the ratio to 18/54 and reduce to 1/3.

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.1 Reduce and build fractions into equivalent forms.

**Question 25**

**Type:** MCSA

Reduce the ratio 10:75 to a fraction in lowest terms.

**1.** 1/7.5

**2.** 5/15

**3.** 2/15

**4.** 1/3

**Correct Answer:** 3

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Convert the ratio to 10/75 and reduce to 2/15.

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.1 Reduce and build fractions into equivalent forms.

**Question 26**

**Type:** MCSA

Reduce the ration 12:24 to a fraction in lowest terms.

**1.** 1/3

**2.** 6/18

**3.** 2/4

**4.** 1/2

**Correct Answer:** 4

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Convert the ratio to 12/24 and reduce to 1/2.

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.1 Reduce and build fractions into equivalent forms.

**Question 27**

**Type:** MCSA

Write 5/8 as an equivalent fraction with 96 in the denominator.

**1.** 96/154

**2.** 65/96

**3.** 60/96

**4.** 5/96

**Correct Answer:** 3

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** 5/8 × 12/12 = 60/96

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.1 Reduce and build fractions into equivalent forms.

**Question 28**

**Type:** MCSA

Write 4/5 as an equivalent fraction with 100 in the denominator.

**1.** 100/80

**2.** 5/100

**3.** 75/100

**4.** 80/100

**Correct Answer:** 4

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** 4/5 × 20/20 = 80/100

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.1 Reduce and build fractions into equivalent forms.

**Question 29**

**Type:** MCSA

Write 17/20 as an equivalent fraction with 100 in the denominator.

**1.** 85/100

**2.** 34/100

**3.** 4/100

**4.** 100/85

**Correct Answer:** 1

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** 17/20 × 5/5 = 85/100

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.1 Reduce and build fractions into equivalent forms.

**Question 30**

**Type:** MCSA

Write 1/5 as an equivalent fraction with 25 in the denominator.

**1.** 25/5

**2.** 25/20

**3.** 5/25

**4.** 1/25

**Correct Answer:** 3

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** 1/5 × 5/5 = 5/25

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.1 Reduce and build fractions into equivalent forms.

**Question 31**

**Type:** MCSA

Write 3/4 as an equivalent fraction with 100 in the denominator.

**1.** 75/100

**2.** 80/100

**3.** 100/25

**4.** 100/75

**Correct Answer:** 1

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** ¾ × 25/25 = 75/100

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.1 Reduce and build fractions into equivalent forms.

**Question 32**

**Type:** MCSA

Round off 6.892489 to the hundredths place.

**1.** 6.9

**2.** 6.89

**3.** 6.8

**4.** 6.892

**Correct Answer:** 2

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** The digit following the hundredths place is 2, so leave 6.89 alone

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.6 Round decimal numbers to a desired number of decimal places.

**Question 33**

**Type:** MCSA

Round off 17.456 to the tenths place.

**1.** 17.5

**2.** 17.4

**3.** 17.46

**4.** 17.56

**Correct Answer:** 1

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** The digits following the tenths place is 5 so add 1 to 4 yielding 17.5

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.6 Round decimal numbers to a desired number of decimal places.

**Question 34**

**Type:** MCSA

Round off 3.5243 to the tenths place.

**1.** 3.6

**2.** 3.4

**3.** 3.5

**4.** 3.52

**Correct Answer:** 3

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** The digit following the tenths place is 2 so leave the 5 alone yielding 3.5

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.6 Round decimal numbers to a desired number of decimal places.

**Question 35**

**Type:** MCSA

Round down 9.6723 to the tenths place.

**1.** 9.7

**2.** 9.6

**3.** 9.67

**4.** 9.72

**Correct Answer:** 2

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** The digit in the tenths place is 6, delete the remaining digits.

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.6 Round decimal numbers to a desired number of decimal places.

**Question 36**

**Type:** MCSA

Round down 4.2894 to the hundredths place.

**1.** 4.3

**2.** 4.29

**3.** 4.28

**4.** 4.2

**Correct Answer:** 3

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** The digit in the hundredths place is 8, delete the remaining digits.

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.6 Round decimal numbers to a desired number of decimal places.

**Question 37**

**Type:** MCSA

Round down 4.0678 to the tenths place.

**1.** 4

**2.** 4.1

**3.** 4.06

**4.** 4.07

**Correct Answer:** 2

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** The digit in the tenths place is 1, delete the remaining digits.

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.6 Round decimal numbers to a desired number of decimal places.

**Question 38**

**Type:** MCSA

Add 4.55 and 0.035.

**1.** 4.9

**2.** 4.5035

**3.** 4.585

**4.** 4.515

**Correct Answer:** 3

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Line up the decimal points and add.

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.5 Add, subtract, multiply, and divide decimal numbers.

**Question 39**

**Type:** MCSA

Add the following decimal numbers: 10.1 + 3.964.

**1.** 14.064

**2.** 13.974

**3.** 13.064

**4.** 14.974

**Correct Answer:** 1

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Line up the decimal points and add.

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.5 Add, subtract, multiply, and divide decimal numbers.

**Question 40**

**Type:** MCSA

Add 4.834 + 3.962 + 1.083.

**1.** 8.879

**2.** 9.793

**3.** 9.879

**4.** 8.793

**Correct Answer:** 3

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Line up the decimal points and add.

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.5 Add, subtract, multiply, and divide decimal numbers.

**Question 41**

**Type:** MCSA

Subtract 1.864 from 3.691.

**1.** 1.827

**2.** 1.823

**3.** 2.827

**4.** 0.827

**Correct Answer:** 1

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Line up the decimal points and subtract.

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.5 Add, subtract, multiply, and divide decimal numbers.

**Question 42**

**Type:** MCSA

Subtract 0.068 from 5.543.

**1.** 4.863

**2.** 5.475

**3.** 5.863

**4.** 5.5362

**Correct Answer:** 2

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Line up the decimal points and subtract.

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.5 Add, subtract, multiply, and divide decimal numbers.

**Question 43**

**Type:** MCSA

Subtract 2.4 from 10.

**1.** 7.6

**2.** 12.40

**3.** 9.76

**4.** 12.4

**Correct Answer:** 1

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Line up the decimal points and subtract.

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.5 Add, subtract, multiply, and divide decimal numbers.

**Question 44**

**Type:** MCSA

Solve the following problem: 3.29 × 1.64. Round off the answer to the tenths place.

**1.** 5.4

**2.** 5.3

**3.** 53.4

**4.** 54.2

**Correct Answer:** 1

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** 3.29 × 1.64 =5.3956 then round off to 5.4

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.5 Add, subtract, multiply, and divide decimal numbers.

**Question 45**

**Type:** MCSA

Multiply 2.87 by 0.064 and round off to the hundredths place.

**1.** 0.19

**2.** 0.183

**3.** 0.1837

**4.** 0.18

**Correct Answer:** 4

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** 2.87 × 0.064 = 0.18368 rounded off to the hundredth place is 0.18

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.5 Add, subtract, multiply, and divide decimal numbers.

**Question 46**

**Type:** MCSA

Multiply 2.4 by 0.5.

**1.** 1.2

**2.** 12

**3.** 0.12

**4.** 120

**Correct Answer:** 1

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** 2.4 × 0.5 = 1.2

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.5 Add, subtract, multiply, and divide decimal numbers.

**Question 47**

**Type:** MCSA

Solve the following problem: 0.68 ÷ 0.4.

**1.** 170

**2.** 17

**3.** 1.7

**4.** 0.17

**Correct Answer:** 3

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Move the decimal point one place to the right on each number, then divide 6.8 by 4 = 1.7

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.5 Add, subtract, multiply, and divide decimal numbers.

**Question 48**

**Type:** MCSA

Divide 8.6 by 0.5.

**1.** 1.72

**2.** .172

**3.** 17.2

**4.** 172

**Correct Answer:** 3

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Move the decimal point one place to the right on each number then divide 86 by 5 = 17.2

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.5 Add, subtract, multiply, and divide decimal numbers.

**Question 49**

**Type:** MCSA

Divide 8.6 by 0.02.

**1.** 0.172

**2.** 4.3

**3.** 430

**4.** 0.43

**Correct Answer:** 3

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Move the decimal point two places to the right and then divide 860 by 2=430

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.5 Add, subtract, multiply, and divide decimal numbers.

**Question 50**

**Type:** MCSA

Multiply 0.089 by 1,000.

**1.** 89

**2.** 8.9

**3.** 0.89

**4.** 0.089

**Correct Answer:** 1

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Move the decimal point three places to the right

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.5 Add, subtract, multiply, and divide decimal numbers.

**Question 51**

**Type:** MCSA

Multiply 0.84 by 100.

**1.** 8.4

**2.** 84

**3.** 840

**4.** 0.084

**Correct Answer:** 2

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Move the decimal point two places to the right yielding 84.

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.5 Add, subtract, multiply, and divide decimal numbers.

**Question 52**

**Type:** MCSA

Multiply 34.2 by 100.

**1.** 3.42

**2.** 342

**3.** 3,420

**4.** 34,200

**Correct Answer:** 3

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Move the decimal point two places to the right yielding 3420

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.5 Add, subtract, multiply, and divide decimal numbers.

**Question 53**

**Type:** MCSA

Divide 0.89 by 100.

**1.** 8.9

**2.** 0.89

**3.** 0.089

**4.** 0.0089

**Correct Answer:** 4

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Move the decimal point two places to the left yielding 0.0089

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.5 Add, subtract, multiply, and divide decimal numbers.

**Question 54**

**Type:** MCSA

Divide 1.24 by 10.

**1.** 0.0124

**2.** 0.124

**3.** 12.4

**4.** 124

**Correct Answer:** 2

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Move the decimal point one place to the left yielding 0.124

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.5 Add, subtract, multiply, and divide decimal numbers.

**Question 55**

**Type:** MCSA

Divide 566.8 by 1,000.

**1.** 5,668

**2.** 56.68

**3.** 5.668

**4.** 0.5668

**Correct Answer:** 4

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Move the decimal point three places to the left.

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.5 Add, subtract, multiply, and divide decimal numbers.

**Question 56**

**Type:** FIB

Write the numbers 0.289, 0.395, 0.0289, and 0.0395 in order of size from smallest to largest. \_\_\_\_\_\_

**Standard Text:**

**Correct Answer:** 0.0289; 0.0395; 0.289; 0.395

**Rationale** : Put in a column and line up the decimal points.

**Global Rationale:**

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.9 Estimate answers.

**Question 57**

**Type:** FIB

Write the numbers 0.003, 0.034, 0.38, and 0.0003 in order of size from smallest to largest. \_\_\_\_\_\_

**Standard Text:**

**Correct Answer:** 0.0003; 0.003; 0.034; 0.38

**Rationale** : Place the numbers in a column and line up the decimal points.

**Global Rationale:**

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.9 Estimate answers.

**Question 58**

**Type:** FIB

Write the numbers 0.3, 0.4, 0.33, and 0.111 in order of size from smallest to largest. \_\_\_\_\_\_

**Standard Text:**

**Correct Answer:** 0.111; 0.3; 0.33; 0.4

**Rationale** : Place the numbers in a column and line up the decimal points.

**Global Rationale:**

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.9 Estimate answers.

**Question 59**

**Type:** FIB

Which is larger: 0.21 or 0.7? \_\_\_\_\_\_

**Standard Text:**

**Correct Answer:** 0.7

**Rationale** : 0.7 is larger than 0.21.

**Global Rationale:**

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.9 Estimate answers.

**Question 60**

**Type:** FIB

Which is larger: 2.45 or 2.6? \_\_\_\_\_\_

**Standard Text:**

**Correct Answer:** 2.6

**Rationale** : 2.6 is larger than 2.45.

**Global Rationale:**

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.9 Estimate answers.

**Question 61**

**Type:** FIB

Which is largest: 0.3, 0.33, or 0.198? \_\_\_\_\_\_

**Standard Text:**

**Correct Answer:** 0.33

**Rationale** : 0.33 is larger than both 0.3 and 0.198.

**Global Rationale:**

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.9 Estimate answers.

**Question 62**

**Type:** MCSA

Add 5 7/8 and 3 1/4.

**1.** 8 3/4

**2.** 9 1/8

**3.** 9 1/4

**4.** 8 1/4

**Correct Answer:** 2

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Convert both denominators to 8 then add 5 7/8 + 3 2/8 = 8 9/8 = 9 1/8

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.2 Add, subtract, multiply, and divide fractions.

**Question 63**

**Type:** MCSA

Add 6 1/2 and 2 3/8.

**1.** 8 7/8

**2.** 9

**3.** 8 12/16

**4.** 9 1/4

**Correct Answer:** 1

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Convert both denominators to 8 then add 6 4/8 + 2 3/8 = 8 7/8

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.2 Add, subtract, multiply, and divide fractions.

**Question 64**

**Type:** MCSA

Add 3 3/4 and 7 1/2.

**1.** 10 1/4

**2.** 10 3/4

**3.** 11 1/2

**4.** 11 1/4

**Correct Answer:** 4

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Convert both denominators to 4 then add: 3 ¾ + 7 2/4 = 10 5/4 or 11 1/4

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.2 Add, subtract, multiply, and divide fractions.

**Question 65**

**Type:** MCSA

Subtract 1 3/4 from 2 3/8.

**1.** 1 3/8

**2.** 1 5/8

**3.** 5/8

**4.** 1

**Correct Answer:** 3

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Convert both denominators to 8, then subtract 2 3/8 – 1 6/8= 5/8

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.2 Add, subtract, multiply, and divide fractions.

**Question 66**

**Type:** MCSA

Subtract 1½ from 4 3/4.

**1.** 4 1/4

**2.** 3 1/2

**3.** 2 3/4

**4.** 3 1/4

**Correct Answer:** 4

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Convert both denominators to 4, then subtract 4 ¾ – 1 2/4 = 3 ¼

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.2 Add, subtract, multiply, and divide fractions.

**Question 67**

**Type:** MCSA

Subtract 2 7/8 from 7 1/4.

**1.** 5 5/8

**2.** 4 5/8

**3.** 4 3/8

**4.** 5 3/8

**Correct Answer:** 3

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Convert both denominators to 8 then subtract 7 2/8 – 2 7/8

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.2 Add, subtract, multiply, and divide fractions.

**Question 68**

**Type:** MCSA

Solve the following problem and write the answer in lowest terms: 16/21 × 7/8 × 1/2.

**1.** 112/336

**2.** 64/147

**3.** 1/3

**4.** 1 109/147

**Correct Answer:** 3

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Cancel before multiplying yielding 1/3

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.2 Add, subtract, multiply, and divide fractions.

**Question 69**

**Type:** MCSA

Solve the following problem and write the answer as a mixed number in lowest terms: 7/8 × 3/4 × 3/16.

**1.** 63/576

**2.** 7/64

**3.** 7/64

**4.** 63/512

**Correct Answer:** 4

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Multiply the numerators (7 × 3 × 3) = 63. Multiply the denominators (8×4×16) = 512 and place the numerator over the denominator yielding 63/512.

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.2 Add, subtract, multiply, and divide fractions.

**Question 70**

**Type:** MCSA

Solve the following problem and write the answer in lowest terms: 3/5 × 4/15 × 25/24.

**1.** 300/1,800

**2.** 30/180

**3.** 3/18

**4.** 1/6

**Correct Answer:** 4

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Cancel before multiplying yielding 1/6

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.2 Add, subtract, multiply, and divide fractions.

**Question 71**

**Type:** MCSA

Solve the following problem and write the answer as a mixed number in lowest terms: 8/11 ÷ 4/9.

**1.** 36/99

**2.** 2/11

**3.** 1 7/11

**4.** 1 28/44

**Correct Answer:** 3

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Invert the second fraction and multiply (8/11× 9/4 = 18/11) and change to 1 7/11

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.2 Add, subtract, multiply, and divide fractions.

**Question 72**

**Type:** MCSA

Solve the following problem and write the answer in lowest terms: 3/4 ÷ 7/8.

**1.** 21/32

**2.** 24/32

**3.** 6/7

**4.** 24/28

**Correct Answer:** 3

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Invert the second fraction and multiply.

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.2 Add, subtract, multiply, and divide fractions.

**Question 73**

**Type:** MCSA

Solve the following problem and write the answer as a whole number or fraction in the lowest terms: 3/200 ÷ 11/300.

**1.** 9/22

**2.** 3/7

**3.** 33/6,000

**4.** 900/2,200

**Correct Answer:** 1

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Invert the second fraction and multiply.

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.2 Add, subtract, multiply, and divide fractions.

**Question 74**

**Type:** MCSA

Simplify the following complex fraction: 3/4 / 7/8

**1.** 1/2

**2.** 2/3

**3.** 3/4

**4.** 6/7

**Correct Answer:** 4

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Write as a division problem: ¾ ÷ 7/8 invert the second fraction and multiply: ¾ × 8/7 = 6/7

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.3Simplify complex fractions.

**Question 75**

**Type:** MCSA

Simplify the following complex fraction: 4/5 / 8/9

**1.** 2/35

**2.** 9/10

**3.** 36/40

**4.** 32/45

**Correct Answer:** 2

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Write as a division problem: 4/5 ÷ 8/9, invert the second fraction and multiply.

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.3Simplify complex fractions.

**Question 76**

**Type:** MCSA

Simplify the following complex fraction: 1/4 / 1/2

**1.** 1/8

**2.** 1/4

**3.** 2

**4.** 1/2

**Correct Answer:** 4

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Write as a division problem: 1/4 ÷ 1/2, invert the second fraction and multiply.

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.3Simplify complex fractions.

**Question 77**

**Type:** MCSA

Simplify the following complex fraction and write as a mixed number in lowest terms: 4/5 / 3/4

**1.** 1 1/15

**2.** 3/5

**3.** 16/15

**4.** 12/20

**Correct Answer:** 1

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Write as a division problem: 4/5 ÷ 3/4, invert the second fraction and multiply.

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.3Simplify complex fractions.

**Question 78**

**Type:** MCSA

Simplify the following complex fraction and write in lowest terms: 1/2 / 3/4

**1.** 3/8

**2.** 4/6

**3.** 2/3

**4.** 1 1/3

**Correct Answer:** 3

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Write as a division problem: 1/2 ÷ 3/4, invert the second fraction and multiply.

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.3Simplify complex fractions.

**Question 79**

**Type:** MCSA

What is 32% of 25?

**1.** 800

**2.** .78

**3.** 7.8

**4.** 8

**Correct Answer:** 4

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Multiply 0.32 by 25 yielding 8

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.8 Find the percent of a number and the percent of change.

**Question 80**

**Type:** MCSA

What is 20% of 19?

**1.** 38

**2.** 3.8

**3.** 98

**4.** 0.95

**Correct Answer:** 2

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Multiply 0.2 by 19 yielding 3.8

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.8 Find the percent of a number and the percent of change.

**Question 81**

**Type:** MCSA

What is 80% of 110?

**1.** 88

**2.** 1.375

**3.** 0.72

**4.** 8800

**Correct Answer:** 1

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Multiply 0.8 by 110 yielding 88

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.8 Find the percent of a number and the percent of change.

**Question 82**

**Type:** MCSA

What is 0.87% of 30?

**1.** 26.1

**2.** 0.261

**3.** 2.9

**4.** 0.34

**Correct Answer:** 2

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Multiply 0.0087 by 30 yielding 0.261

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.8 Find the percent of a number and the percent of change.

**Question 83**

**Type:** MCSA

What is 20% of 50?

**1.** 0.4

**2.** 100

**3.** 10

**4.** 2.5

**Correct Answer:** 3

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Multiply 0.2 by 50 yielding 10

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.8 Find the percent of a number and the percent of change.

**Question 84**

**Type:** FIB

The client was taking 250 mg of ampicillin every six hours. The doctor increased the dosage to 400 mg every six hours. What percentage of change was made in the dosage? \_\_\_\_\_\_%

**Standard Text:**

**Correct Answer:** 60

**Rationale** : Fraction of change = change in dose/old dose = 150/250 = .6, or 60% increase in dosage.

**Global Rationale:**

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.8 Find the percent of a number and the percent of change.

**Question 85**

**Type:** MCSA

The client's dosage of Lanoxin (digoxin) was changed from 0.125 mg to 0.5 mg. What percentage was the dosage increased?

**1.** 0.25 %

**2.** 40%

**3.** 400%

**4.** 300%

**Correct Answer:** 4

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Fraction of change = change in dose/old dose = 0.375/0.125 = 3 0r 300% increase in dosage.

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.8 Find the percent of a number and the percent of change.

**Question 86**

**Type:** MCSA

A dosage is changed from 4 mg per day to 6 mg per day. Find the percentage of increase.

**1.** 150%

**2.** 67%

**3.** 50%

**4.** 33%

**Correct Answer:** 3

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Fraction of change = change in dose/old dose = 2/4 = .5 or 50% increase in dosage.

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.8 Find the percent of a number and the percent of change.

**Question 87**

**Type:** MCSA

The old price was $19.95. The sale price is $11.97. What is the percentage discount?

**1.** 20%

**2.** 40%

**3.** 60%

**4.** 80%

**Correct Answer:** 2

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Fraction of discount = Change in price/old price = 7.98/19.95=0.4 or 40%

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.8 Find the percent of a number and the percent of change.

**Question 88**

**Type:** MCSA

The client's dosage of Tenormin (atenolol) is reduced from 75 mg to 60 mg. What is the percentage decrease?

**1.** 67%

**2.** 15%

**3.** 150%

**4.** 20%

**Correct Answer:** 4

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Fraction of change = change in dose/old dose = 15/75 = .2 or 20% decrease in dosage.

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.8 Find the percent of a number and the percent of change.

**Question 89**

**Type:** MCSA

A dosage is changed from 12 mg per day to 9 mg per day. What is the percentage decrease?

**1.** 25%

**2.** 13%

**3.** 75%

**4.** 33%

**Correct Answer:** 1

**Rationale 1**:

**Rationale 2**:

**Rationale 3**:

**Rationale 4**:

**Global Rationale:** Fraction of change = change in dose/old dose = 3/12 = .25 or 25% decrease in dosage.

**Cognitive Level:**

**Client Need:**

**Client Need Sub:**

**Nursing/Integrated Concepts:**

**Learning Outcome:** 1.8 Find the percent of a number and the percent of change.

**Question 90**

When rounding down to the tenths place, the number 5.34 rounds to:

**Type: NCLEX M/C**

**1.** 5.30

**2.** 5.3

**3.** 5.4

**4.** 5

**Correct Answer:** 2

**Global Rationale:** When rounding down, add 0 to the tenths-place digit and delete the remaining digits.

**Learning Outcome 1.6:** Round decimal numbers to a desired number of decimal places.

**Question 91**

When rounding up to the tenths place, the number 5.34 rounds to:

**Type: NCLEX M/C**

**1.** 5.30

**2.** 5.3

**3.** 5.4

**4.** 5

**Correct Answer:** 3

**Global Rationale:** When rounding up, add 1 to the tenths-place digit and delete the remaining digits.

**Learning Outcome 1.6:** Round decimal numbers to a desired number of decimal places.

**Question 92**

Which number is larger, 0.60 or 0.45?

**Type: NCLEX M/C**

**1.** 0.60

**2.** 0.45

**Correct Answer:** 1

**Global Rationale:** Because 60 hundredths is larger than 45 hundredths, 0.60 is larger than 0.45.

**Learning Outcome 1.5:** Add, subtract, multiply, and divide decimal numbers.

**Question 93**

2/3 expressed as a percent is:

**Type: NCLEX M/C**

**1.** 65%

**2.** 67%

**3.** 66%

**4.** 70%

**Correct Answer:** 2

**Global Rationale:** Divide the numerator by the denominator, multiply by 100, and round to the whole number.

**Learning Outcome 1.8:** Find the percent of a number and the percent of change.

**Question 94**

A patient who weighed 180 lbs. has lost 25 lbs. over the last three months. What is the percentage of weight lost?

**Type: NCLEX M/C**

**1.** 13.9%

**2.** 13.8%

**3.** 1.37%

**4.** 0.14%

**Correct Answer:** 1

**Global Rationale:** Divide the numerator by the denominator to determine the percentage, multiply by 100, and round to the whole.

**Learning Outcome 1.8:** Find the percent of a number and the percent of change.

**Question 95**

Mr. Grassie has had made lifestyle modifications and has been able to have his metformin (Glucophage) decreased from 1,000 mg per day to 500 mg per day. What is the percentage of the decrease of the medication dosage?

**Type:** m/c, non-NCLEX

**1.** 0.3

**2.** 0.25

**3.** 0.5

**4.** 0.75

**Correct Answer:** 3

**Global Rationale:** Divide the numerator by the denominator to determine the percentage. If expressing in terms of percent, the answer would be multiplied by 100.

**Learning Outcome 1.8:** Find the percent of a number and the percent of change.

**Question 96**

Mrs. Macron has been ordered 0.125 mg of digoxin. Her previous dose of digoxin was 0.25 mg. Has her dose of digoxin been increased or decreased?

**Type:** m/c, non-NCLEX

**1.** Increased

**2.** Decreased

**Correct Answer:** 2

**Global Rationale:** 0.25 is larger than 0.125.

**Learning Outcome 1.5:** Add, subtract, multiply, and divide decimal numbers.

**Question 97**

Put the following numbers in order from smallest to largest:

3/4, 1/3, 0.25, 0.67, 7/8, 0.45

**Type:** FIB

**Correct Answer:** 0.25, 1/3, 0.45, 0.67, 3/4, 7/8

**Global Rationale:** Order from smallest to largest.

**Learning Outcome 1.4:** Convert between decimal numbers and fractions.

**Question 98**

Write 3.75 as a mixed number and as an improper fraction.

**Type:** Essay/long hand answer

**Correct Answer:** 3 3/4 and 15/4

**Global Rationale:** 3.75 reduced to lowest terms is 3 3/4, as an improper fraction 15/4.

**Learning Outcome 1.1:** Reduce and build fractions into equivalent forms.

**Question 99**

Write the following numbers in a column with the decimal points lined up. Add the numbers and round to the hundredth decimal place.

0.124, 0.363, 0.785, 0.335

**Type:** Essay/long hand answer

**Correct Answer:**

0.124

0.363

0.785

0.335

**Total:** 1.61

**Global Rationale:** Total of numbers is 1.607, rounded to the nearest hundredth decimal place is 1.61.

**Learning Outcome 1.5, 1.6:** Add, subtract, multiply, and divide decimal numbers; round decimal numbers to a desired number of decimal places.

**Question 100**

Convert the fractions to decimals and add them. Round to the hundredth decimal place. Show your work.

4/5, 6/8, 1/3, 8/11, 5/16

**Type:** Essay/long hand answer

**Correct Answer:**

4/5 = 0.8

6/8 = 0.75

1/3 = 0.33

8/11 = 0.73

5/16 = 0.31

Total =0.31

**Global Rationale:** Total of numbers is 0.3125, rounded to the hundredth decimal place answer is 0.31.

**Learning Outcome 1.4, 1.5:** Convert between decimal numbers and fractions; add, subtract, multiply and divide decimal numbers.

**Question 101**

Simplify and write the answer in decimal form. Round your answer to the nearest hundredth.

0.78 ÷ 3/4

**Type:** Essay/long hand answer

**Correct Answer:** 1.04

**Global Rationale:** 0.78 ÷ 0.75 = 1.04.

**Learning Outcome 1.4, 1.5, 1.6:** Convert between decimal number and fractions; add, subtract, multiply, and divide decimal numbers, round decimal numbers to a desired number of decimal places.

**Question 102**

Simplify and write the answer in decimal form. Round your answer to the nearest tenth.

15 x 3/8 ÷ 1/4

**Type:** Essay/long hand answer

**Correct Answer:** 22.5

15 x 0.375 ÷ 0.25 = 22.5.

**Global Rationale:** 15 x (3/8 = 0.375) ÷ (1/4 = 0.25)

**Learning Outcome 1.4, 1.5, 1.6:** Convert between decimal number and fractions; add, subtract, multiply, and divide decimal numbers, round decimal numbers to a desired number of decimal places.