Review 2B : Operations with Decimals and Fractions

1. A large bag of cashews weighs $8\frac{1}{3}$ pounds. One serving is $\frac{1}{3}$ pound. How many servings are in the bag?

   A $23\frac{13}{15}$ C 25

   B $24\frac{1}{15}$ D $25\frac{7}{15}$

2. What is the reciprocal of $\frac{5}{8}$?

   A $-\frac{8}{5}$ C -5

   B $-\frac{5}{8}$ D $\frac{8}{5}$

3. Mariel wrote these checks from her checking account: \$10, \$10, \$31, and \$10. Which number shows the change in the balance of her account?

   A $-\$61$ C \$1

   B $-\$1$ D \$61

4. Mr. Franklin paid \$33.20 for 8 gallons of gas. What is the price of 1 gallon of gas?

   A \$4.05 C \$4.15

   B \$4.13 D \$4.25

5. The area of a library tabletop is $27\frac{1}{8}$ square feet. The table is $3\frac{1}{2}$ feet wide. What is the length of the table?

   A 7 ft C $7\frac{7}{8}$ ft

   B $7\frac{3}{4}$ ft D 8 ft

6. Which expression has the same value as $8 - (-4)$?

   A $-8 + 4$ C $8 + (-4)$

   B $-8 + (-4)$ D $4 - (-8)$

7. Deion has a $\frac{3}{4}$-pound bag of dog treats. He will give his dog $\frac{1}{8}$ pound of the treats after they play each day. How many days will the bag last?

   A 6 days C 8 days

   B 7 days D 9 days

8. A horseshoe weighs 8.2 ounces. The nails make up 0.2 of that weight. What is the weight of the horseshoe without the nails?

   A 1.64 oz C 9.84 oz

   B 6.56 oz D 16.4 oz

9. A trampoline has a rectangular jumping surface that is 10.3 feet long and 9.2 feet wide. What is the area of the jumping surface?

   A 9.476 ft^2 C 947.6 ft^2

   B 94.76 ft^2 D 9,476 ft^2

10. How does the product of two negative factors compare to the original factors?

    A The product is less than the factors.

    B The product will be equal to one factor.

    C The product will be greater than or equal to one factor.

    D The product will be greater than the factors.

11. Which expression has an answer that is negative?

    A $(-48) \div 6$ C $(-6)(-3)$

    B $(-48) \div (-6)$ D $(6)(3)$

12. In 4 hours, the temperature steadily fell from 0°F to −12°F. What was the average change in temperature per hour?

    A −8°F C −2°F

    B −3°F D 3°F

13. Of the animals at the shelter, $\frac{5}{8}$ are cats. Of the cats, $\frac{2}{3}$ are kittens. What fraction of the animals at the shelter are kittens?

14. Ian has a 12.2-ounce bottle of ketchup. He uses $\frac{1}{20}$ of the ketchup every time he has a buffalo burger. How many ounces of ketchup are left after Ian has eaten 4 buffalo burgers?

15. a. Mr. Gordon weighs 205 pounds. Multiply his Earth weight by 0.91 to find how much he would weigh on the planet Venus.

    b. What is the difference between Mr. Gordon's Earth weight and his weight on Venus?

16. Write an integer expression that has the same value as $36 \div (-9) + (-5)$.

17. The diameter of a U.S. penny is $\frac{3}{4}$ inch. How many pennies would it take to make a row 42 inches long?

18. A football team lost 4 yards on each of 2 plays, gained 14 yards on the third play, and lost 5 yards on the fourth play. Write and find the value of an integer expression to find the change in their field position.

19. Dwayne earns $11.45 per hour. Last week he worked $38\frac{1}{4}$ hours. How much did he earn last week?

20. Explain how you can determine the sign of an integer quotient without dividing.

21. Maya tried to play a new video game. On her first 4 tries, she lost 14 points, lost 8 points, won 2 points, and lost 8 points, and finally gave up. Write and find the value of an integer expression to show her final score.

22. a. Brooke paid $45 for a course on candle-making. She spent $106 for wax and supplies, but later returned one $8 candle mold. Write and find the value of an integer expression to show the change in the amount of money she has.

    b. If Brooke sells her candles for $9 each, how many will she have to sell before she makes a profit?