Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Class: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**6th Grade Unit 4: Decimal Operations Post Test**

\_\_\_\_\_\_\_\_\_\_1. Jeremy went shopping for a new couch. The original price of the couch was $525.00. There is a 30% off sale. What is the sale price of the couch?

1. $725.00
2. $750.00
3. $367.50
4. $555.00

\_\_\_\_\_\_\_\_\_\_2. The Dante family drove 4,615.8 miles in 49 days on a road trip. What is the average number of miles the family drove per day?

1. 9.42
2. 94.2
3. 97.6
4. 94

\_\_\_\_\_\_\_\_\_\_3. Identify the correct operation to solve the following problem:

What is the combined thickness of these five pieces of tape that each have the following measurement: 0.008, 0.125, 0.15, 0.185, and 0.005 cm?

1. Subtraction
2. Multiplication
3. Division
4. Addition

\_\_\_\_\_\_\_\_\_\_4. Find the difference when you subtract 70.82 from 85.65.

1. 148.3
2. 55.83
3. 19.82
4. 14.83

\_\_\_\_\_\_\_\_\_\_5. Solve: 3.89 + 4.1

A. 7.99

B. 4.3

C. 8.08

D. 8.19

\_\_\_\_\_\_\_\_\_\_6. MS 181 has 500 students, 245 attended the Valentine’s Dance. What percent of the students did not go to the dance?

1. 49%
2. 51%
3. 5.1%
4. 100%

\_\_\_\_\_\_\_\_\_\_7. The Goodheart family drove 48.7 miles to MS 181. It took them 1.2 hours to get there. How fast did they drive? Round to the nearest thousandth.

 A. 40.583 mph

 B. 40.584 mph

 C. 405.83 mph

 D. 405.84 mph

\_\_\_\_\_\_\_\_\_\_8. Marquel and his dad are shopping for food. Marquel asks his dad if they can buy Cookie Crisp cereal. His dad says sure, but says he wants to get the best deal. There are two different sized boxes. There is a 25oz box for $5, and a 20oz box for $4.40. Which statement is true?

1. The 20oz box is the better deal because it has a unit rate of $0.20 per ounce.
2. The 25oz box is the better deal because it has a unit rate of $0.22 per ounce.
3. The 20oz box is the better deal because it has a unit rate of $0.22 per ounce.
4. The 25oz box is the better deal because it has a unit rate of $0.20 per ounce

\_\_\_\_\_\_\_\_\_\_9. Solve: 0.36 ÷ 12 =

1. 0.3
2. 0.03
3. 3
4. 0.003

\_\_\_\_\_\_\_\_\_\_10. What is the cost of 14.6 gallons of gasoline at $2.70 per gallon?

1. $17.30
2. $39.42
3. $32.00
4. $39.00

\_\_\_\_\_\_\_\_\_\_11. Donna paid $180.00 for a new bike. This was the price after a 25% discount was applied. What was the original price of the bag?

1. $240.00
2. $200.00
3. $380.00
4. $180.25

\_\_\_\_\_\_\_\_\_\_12. Divide: 5.6 ÷ 0.7 =

1. 0.8
2. 8
3. 0.08
4. 80

\_\_\_\_\_\_\_\_\_\_13. What is the sum of 451.12 and 35.5?

1. 4866.2
2. 486.62
3. 45467
4. 454.67

\_\_\_\_\_\_\_\_\_\_14. On Monday morning, a school cafeteria had 6.43 gallons of milk. At lunch, the students drank 4.16 gallons of the milk. How much milk does the cafeteria have left?

A. 2.27

B. 2.23

C. 1.27

D. 2.25

\_\_\_\_\_\_\_\_\_\_ 15. Divide: 16.88 by 0.2.

1. 84.4
2. 8.44
3. 844
4. 0.844

\_\_\_\_\_\_\_\_\_\_ 16. Which number sentence would be used to solve the problem below?

*Mr. Medina has a box of candy bars that weighs 48 oz. of candy total. Each bar weighs 1.2 oz. How many total bars does he have?*

1. 48/1.2
2. 48 – 1.2
3. 48 + 1.2
4. 48(1.2

\_\_\_\_\_\_\_\_\_\_ 17. A salesperson had $240,00 in sales last year, which is 60% of the sales she had this year. Which equation could be used to determine *x,* the salesperson’s total amount of sales, in dollars, for this year?

1. $\frac{240,000}{x}= \frac{60}{100}$
2. $\frac{240,000}{100}= \frac{x}{60}$
3. $\frac{60}{240,000}= \frac{x}{100}$
4. $\frac{60}{100}= \frac{x}{240,000}$

\_\_\_\_\_\_\_\_\_\_18. Sam paid $8.28 for 18 stamps. At this rate, how much would it cost Sam to buy 12 stamps?

1. $2.19
2. $2.28
3. $3.72
4. $5.52

\_\_\_\_\_\_\_\_\_\_19. Find the product of 2.5 and 30.

1. 750
2. 730
3. 75
4. 73

\_\_\_\_\_\_\_\_\_\_20. Steve went shopping to the electronic and appliance sale at Best Buy. He paid $208.25 for a television that was originally $245.00. What was the percent discount on the television?

1. 85%
2. 20%
3. 15%
4. 12%

\_\_\_\_\_\_\_\_\_\_21. Residents of a small city voted on whether to allow a developer to build a shopping center. The number of votes in favor of the shopping center was 4,400. The number of votes against the shopping center was 17,600. What percent of the voters were in favor of building the shopping center?

1. 20%
2. 25%
3. 40%
4. 44%

\_\_\_\_\_\_\_\_\_\_22. Your homeroom teacher is hosting a party. You were asked to purchase Doritos. You need to buy 64 bags of Doritos. Each bag costs $3.79. If you have $250.00 in your wallet, how much change do you receive?

1. $186.00
2. $242.56
3. $7.44
4. $241.56

\_\_\_\_\_\_\_\_\_\_23. Find the sum of 0.57 and 0.8.

A. 0.69

B. 0.65

C. 0.75

D. 1.37

\_\_\_\_\_\_\_\_\_\_24. Stephani has 14.25 cups of cupcake batter. If each cupcake uses 0.75 cup of batter, how many cupcakes can Stephani make?

1. 20 cupcakes
2. 1.9 cupcakes
3. 18 cupcakes
4. 19 cupcakes

\_\_\_\_\_\_\_\_\_\_25. Ms. Sullivan and Ms. Rabinowitz each drive a lot during their Summer vacation. On average, they have driven 7,000 miles in the summer combined. Last Summer, Ms. Sullivan drove 600 miles and used 40 gallons of gas. Last Summer Ms. Rabinowits drove 1,200 miles and used 48 gallons of gas. Which teacher’s car uses less gas?

1. Ms. Rabinowitz’s care is more fuel efficient. It gets 25 miles per gallon.
2. Ms. Sullivan’s car is more fuel efficient. It gets 25 miles per gallon.
3. Ms. Rabinowitz’s car is more efficient. It gets 15 miles per gallon.
4. Ms. Sullivan’s car is more efficient. It gets 15 miles per gallon.

\_\_\_\_\_\_\_\_\_\_ 26. The Scientific Method quiz is worth 25 points. Each question was worth 0.5 points. How many total questions were on the quiz?

1. 20 questions
2. 10 questions
3. 50 questions
4. 100 questions

\_\_\_\_\_\_\_\_\_\_27. Sam is saving $1.75 each day. How much money will he have after 14 days?

1. 12.55
2. 24.50
3. 12.25
4. 11.25

\_\_\_\_\_\_\_\_\_\_28. Barry works as a waiter for the new vegetarian restaurant “Bootcamp”. His favorite customers ate dinner last night and paid an 18% tip on their meal. If the tip came out to $11.70, what was the cost of their meal including tip?

1. $53.30
2. $29.70
3. $65.00
4. $76.70

\_\_\_\_\_\_\_\_\_\_29. Identify the correct operation to solve the following problem:

Christian earns $3.50/day on his paper route. Christian works 7 days a week. How much money does he earn per week?

1. 3.5 + 7
2. 3.5/7
3. 3.5 – 7
4. 3.5(7)

\_\_\_\_\_\_\_\_\_\_30. Raheem purchased 40 doughnuts at $0.65 each, how much did the doughnuts cost?

1. $26.00
2. $49.50
3. $105.50
4. $25.50

\_\_\_\_\_\_\_\_\_\_31. Solve: 9.9 - 4.34

A. 5.66

B. 5.65

C. 5.34

D. 5.56

\_\_\_\_\_\_\_\_\_\_32. Kristina fills the gas tank of her car with 9.5 gallons of gas. If she spends $11.02, how much does the gas cost per gallon?

1. $11.60 per gallon
2. $1.16 per gallon
3. $1.20 per gallon
4. $12.00 per gallon

\_\_\_\_\_\_\_\_\_\_33. Ms. Goodheart was shopping at C-Town and wanted to get some laundry detergent. The 32oz bottle was $8.00. What is the unit rate?

1. $0.25 per ounce.
2. $0.22 per ounce.
3. $4.00 per ounce
4. $0.40 per ounce

\_\_\_\_\_\_\_\_\_\_34. Find the product of 145(0.23)

1. 35
2. 33.35
3. 3.5
4. 33.3

\_\_\_\_\_\_\_\_\_\_35. Identify the correct number sentence to solve the following problem:

A member of the school track team ran for a total of 179.3 miles in practice over 61 days. About how many miles did he average per day?

1. 179.3 ÷ 61 =
2. 179.3 x 61 =
3. 61 ÷ 179.3 =
4. 179.3 + 61 =

\_\_\_\_\_\_\_\_\_\_36. At a concert, 20% of the audience members were teenagers. If the number of teenagers at the concert was 360, what was the total number of audience members?

1. 432
2. 450
3. 1,800
4. 7,200

\_\_\_\_\_\_\_\_\_\_37. Kira studied data collected on the school basketball team for one season. She noticed that a player on the team had 13 successful free throws out of a total of 20 attempted free throws. To find the percentage of the total free throws attempted by this player that were successful, Kira set up the equivalent ratios below.

$$\frac{13}{20}= \frac{m}{n}$$

What are the values of *m* and *n* in Kira’s equation?

1. m = 65, n = 1
2. m = 100, n = 65
3. m = 93, n = 100
4. m = 65, n = 100

\_\_\_\_\_\_\_\_\_\_38. A company paid $48.00 for 2 cases of printer paper. Each case contained 12 packages of paper. Next month the company’s office manager needs to order 180 packages of the same paper. If the price per package does not change, what would be the total cost of next month’s orer?

1. $90
2. $360
3. $720
4. $1,140

\_\_\_\_\_\_\_\_\_\_39. Felicity babysat 2.5 hours each night for 10 nights. She earned $243.75 in total. Felicity wants to calculate her hourly rate. How much did Felicity earn per hour babysitting?

1. $24.38
2. $24.37
3. $9.75
4. $25.00

\_\_\_\_\_\_\_\_\_\_40. A punch recipe requires 2 cups of cranberry juice to make 3 gallons of punch. Using the same recipe, what is the amount of cranberry juice needed for 1 gallon of punch?

1. 3 cups
2. 1$\frac{1}{2}$ cups
3. 1 cup
4. $\frac{2}{3}$ cups