

Name \_\_\_\_\_ Date \_\_\_\_\_

**"Percent and Proportion Review"**

1. Sanaa has 4 days to travel 840 miles. She wants to complete about 80% of the trip by the start of day 4. Which of the following is the closest to the distance she should drive on each of the first three days?
  - a) 672 miles
  - b) 224 miles
  - c) 168 miles
  - d) 420 miles
  
2. Aubrey is building a 1,500 square feet home. Her contractor asks her to pay a little more money and he will increase the square footage by 12%. Aubrey agrees to pay the extra money. What will the new square footage of the home be?
  - a) 1,815 sq ft
  - b) 1,320 sq ft
  - c) 1,680 sq ft
  - d) 2,820 sq ft
  
3. A big screen TV normally sells for \$569.98. It is now on sale for 33% off. As an employee, Crissan is able to save an extra 15% off the sale price. How much, to the nearest dollar, would Crissan need to pay for the TV?
  - a) \$325
  - b) \$382
  - c) \$57
  - d) \$188
  
4. Today, Torren's lunch cost \$11.50 and he left a \$1.61 tip. Tomorrow, Torren wants to buy the meal that cost \$13.25. If he wants to leave the same tip rate that he left today, how much of a tip will Torren leave?
  - a) \$1.93
  - b) \$1.75
  - c) \$1.86
  - d) \$1.52
  
5. Mikalia deposits \$100 into a new savings account.
  - The account earns 5.9% simple interest per year.
  - No money is added or removed from the savings account for 3 years.

What is the total amount of money in her savings account at the end of the 3 years?

  - a) \$17.70
  - b) \$159.00
  - c) \$277.00
  - d) \$117.70



9. The table shows the relationship between  $x$ , the amount of time in hours, and  $y$ , the distance traveled in miles, by a probe before it reaches Mars.

Time (h)	2	4	6
Distance (m)	24,000	48,000	72,000

Does the table represent a proportional relationship? Why or why not?

Determine the number of miles the probe travels in 5.5 hours.

Answer \_\_\_\_\_

10. D'naiya used a sensor to measure the speed of a moving car at different times. At each time, the sensor measured the speed of the car in both miles per hour and kilometers per hour. The table below shows her results.

RECORDED SPEEDS

Speed (miles per hour)	Speed (kilometers per hour)
11.0	17.699
26.0	41.834
34.0	54.706

Based on her results, which statement describes the relationship between  $m$ , the speed of the car in miles per hour, and  $k$ , the speed of the car in kilometers per hour?

- a) The relationship is proportional because the ratio of  $m$  to  $k$  is constant
- b) The relationship is not proportional because the ratio of  $m$  to  $k$  is constant
- c) The relationship is proportional because the difference between  $m$  and  $k$  is constant
- d) The relationship is not proportional because the difference between  $m$  and  $k$  is constant

11. George is dividing a side of meat into 4 equal-sized pieces. If each piece weighs 9.3 pounds and there is 1.9 pounds of meat left over, how much did the piece of meat weigh?
- a) 37.2 pounds
  - b) 16.9 pounds
  - c) 39.1 pounds
  - d) 35.3 pounds

12. Coach Nathan ordered sweat suits for the football team from two different suppliers. One supplier charge's \$28 for each sweat suit plus a 7% shipping charge. The other supplier charges \$34 for each sweat suit plus 5% shipping charge.
- a) Coach Nathan ordered the same number of sweat suits from each supplier. Write two expressions to represent the shipping charges he paid to both supplies. Use  $x$  to represent the number of sweat suits ordered.

Expressions \_\_\_\_\_

- b) The first supplier gave Coach Nathan a discount of 10% off of his order total. The second supplier gave him a discount of \$20 off of his order total. Write two equations to represent the total costs he paid to each supplier. Use  $x$  to represent the number of sweat suits he ordered.

Equation \_\_\_\_\_

- c) Coach Nathan ordered 27 sweat suits from each supplier. How much did he pay?

Answer \_\_\_\_\_

Name \_\_\_\_\_ Date \_\_\_\_\_

**"Number System, Expressions / Equations, & Ratios / Proportions (Short Response) Review"**

1. Nancy uses  $3\frac{3}{4}$  pounds of white flour and  $1\frac{5}{8}$  pounds of wheat flour for each batch of pasta. One week she uses a total of 86 pounds of flour.

**Part A**

Write an equation to solve for b, the number of batches of pasta that Nancy can make during the week.

Equation \_\_\_\_\_

**Part B**

How many batches of pasta does she make?

Answer \_\_\_\_\_

2. Maia and Rihana are stuffing bags for a charity. Rihana stuffed a total of 60 bags. This is 10 more than twice the number of bags that Maia stuffed.

**Part A**

Write an equation that can be used to find the number of bags, a, that Rihana stuffed.

Equation \_\_\_\_\_

**Part B**

How many envelopes did Rihana stuff?

Answer \_\_\_\_\_

3. Noah ordered Sweat Suits for the track team from two different Sweat Suit suppliers. One supplier charged \$16 for each Sweat Suit, as well as 5% for shipping. The other supplier charged \$18 for each Sweat Suit, plus 7% for shipping.

Part A

Noah ordered the same number of Sweat Suits from each supplier. Write two expressions to represent the shipping charges he paid to both suppliers. Use  $x$  to represent the number of Sweat Suits ordered.

Expressions \_\_\_\_\_

Expressions \_\_\_\_\_

Part B

The first supplier gave Noah a discount of 10% off of his order total. The second supplier gave him a discount of \$20 off of his order total. Write two equations to represent the total costs he paid to each supplier. Use  $x$  to represent the number of Sweat Suits ordered.

Equation \_\_\_\_\_

Equation \_\_\_\_\_

Part C

Noah ordered 15 Sweat Suits from each supplier. How much did he pay?

Answer \_\_\_\_\_

4. Amir had less than \$9 to spend when she went to the grocery store. She bought 1 pound of tomatoes and wanted to spend the rest of her money on potatoes. One pound of tomatoes costs \$2.40 and one pound of potatoes costs \$2.20.

Part A

Write an inequality to show how many pounds of potatoes,  $x$ , Amir can buy.

Inequality \_\_\_\_\_

Part B

Solve the inequality above to find how many pounds of potatoes Amir can buy.

Answer \_\_\_\_\_