Trimester 3 - Cumulative Review

Numeric Response

Use the Cross Products Property to solve the proportion.

1.
$$\frac{33}{21} = \frac{22}{m}$$

Write the decimal as a percent.

2. 1.35

Write the percent as a decimal.

3. 32.3%

You spin the spinner twice. Find the probability of the event.



- 4. Spinning a 3 then a 4
- 5. Spinning a 2 then a number greater than 2

You randomly choose one marble from the jar. Find the theoretical probability of the event.



- 6. Choosing a green marble
- 7. *Not* choosing a red marble

You toss two dimes 24 times and record the results. Use the table to find the experimental probability of the event.

Outcome	Frequency
head and head	4
head and tail	15
tail and tail	5

- 8. Tossing one head and one tail
- 9. *Not* tossing two heads
- 10. A store sells nine types of cell phones. There are four colors of each type. How many different options does a customer have when buying a cell phone at the store?

Short Answer

Simplify the expression.

1. 12x + 9 - 3x - 4

Find the sum or difference.

- 2. (3x-5) + (4x+1)
- 3. (2m+7) (3-4m)

Solve the equation. Check your solution.

4. b - 6 = -11

5.
$$8 = q + 15$$

$$6. \quad \frac{n}{-5} = 7$$

7.
$$17 = -7z + 3$$

8.
$$-7 = \frac{z}{2} + 1$$

Solve the inequality. Graph the solution.

9. $c - 2.8 \ge -0.3$

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10. 3t - 1 < 8

Write the word sentence as an inequality.

11. A number x divided by -1 is at least -4

Tell whether the given value is a solution of the inequality.

12. $x - 2 \ge -1.6; x = 0.8$

Write the ratio as a fraction in simplest form.

13. 24 players : 3 teams

Tell whether the ratios form a proportion.

14. $\frac{11}{12}, \frac{33}{36}$

Tell whether the two rates form a proportion.

15. 25 cars in 5 days; 60 cars in 12 days

Solve the proportion.

16.
$$\frac{33}{p} = \frac{3}{28}$$

17.
$$\frac{w}{84} = \frac{5}{7}$$

Find the unit rate.

18. 240 kilometers in 2.5 hours

Use a number line to order the numbers from least to greatest.

19. 26.2, 262%, $2\frac{3}{5}$

20. The percent of students that voted for a class trip is shown.

Amusement Park	Museum	Circus
47%	8%	29%

- a. Write the percents as decimals.
- b. Write the percents as fractions.
- c. What percent of the students voted for a different class trip?

Tell which letter shows the graph of the number.

21. 19.2%,
$$\frac{2}{9}$$
, 0.175, $\frac{1}{5}$

23.

- 22. The numbers of points scored in each basketball game are 49, 36, 61, 64, 39, 41, 43, and 39.a. Make a box-and-whisker plot for the data.
 - b. In what percent of the games were at least 55 points scored?
 - c. Are the data more spread out below the first quartile or above the third quartile? Explain
 - d. Find and interpret the interquartile range of the data.

Write an expression in simplest form that represents the perimeter of the polygon.



Trimester 3 - Cumulative Review Answer Section

NUMERIC RESPONSE

- 1. 14
- 2. 135%
- 3. 0.323
- 4. 1/36
- 5. 1/9
- 6. 1/6
- 7. 2/3
- 8. 5/8
- 9. 5/6
- 10. 36

SHORT ANSWER

1. 9x + 52. -x - 43. 6m + 44. b = -55. q = -76. n = -357. z = -28. z = -169. $c \ge 2.5$ 2.5 -1 0 1 2 5 4 5 10. *t* < 3; 4| | | 0 | 1 2 3 4 5 11. $x \div (-1) \ge -4$ 12. yes 13. $\frac{8 \text{ players}}{1 \text{ team}}$ 14. yes 15. yes 16. p = 30817. w = 6018. 96 kilometers per hour 19. $2\frac{3}{5}$, 262%, 26.2



b. 25%

c. above; The whisker for the fourth quartile is longer than the whisker for the first quartile.

d. 16; The middle half of the points scored vary by no more than 16 points.

23. 39x - 4