1. Translate $∆$ XYZ is translated 8 units to the left and 3 units down to form $∆$ X’ Y’ Z’. List the coordinates of X’, Y’, and Z’.

2. Question 1: Reflect $∆$ABC across the x-axis to form $∆$A’B’C’. List the coordinates of A’, B’, & C’.

A

C

B

2. Question 2: Reflect $∆$ABC across the y-axis to form $∆$A’B’C’. List the coordinates of A’, B’, & C’.

A

C

B

3. Describe the transformation from P to P’.

P (-4, -2)

 P’ (-1, 3)

4. Question 1: $∆$ DEF is shown on the coordinate grid. Reflect it across the y-axis and give the coordinates of D’, E’, & F’.



4. Question 2: $∆$ DEF is shown on the coordinate grid. Reflect it across the x-axis and give the coordinates of D’, E’, & F’.



5. Devin answered 36 of the 48 questions on his math six weeks test correctly. What percent of questions did Devin get right?

6. Nikki made 75% of her shots in the basketball game last night. If Nikki made 9 shots, then how many shots did she attempt in the game?

7. Alejandra bought a 20-pack of watermelon gum; she has chewed 40% of the gum. How many sticks of gum has Alejandra chewed?

8. Sarah has completed 12 out of 15 problems for math. What percent of the math problems has Sarah completed?

9. Taylor has a bag of Hershey miniatures with 2 Hershey bars, 2 Krackle bars, 3 Special Dark bars, and 1 Mr. Goodbar. What percent of the candy bars are NOT Special Dark bars?

10. Caitlin’s mom bought a new laptop from Best Buy. The regular price of the laptop was $760, but it was on sale for 20% off. What was the sale price of the laptop?

Use the table below for questions 11 & 12.

 “Marshmallow Mania” Contestant: Jeffery

|  |  |  |
| --- | --- | --- |
| x, # of minutes | MathematicalProcess | y, # of Marshmallows |
| 0 |  | 0 |
| 1 |  | 3 |
| 2 |  | 6 |
| 3 |  | 9 |
|  |  |  |
|  8 |  | ? |
| X | (description) | (equation)?? |

11. Jeffery’s data for the “Marshmallow Mania” contest is recorded in the table above. At this rate, how many marshmallows will Jeffery eat in 8 minutes?

12. Based on the “Marshmallow Mania” data given in the table above, which equation can be used to find “ y”, the number of marshmallows that Jeffery would eat in “x” minutes?

A $y = x ÷ 3$

B $y = x + 3$

C $y = 3x$

D $y = x - 3$

13. Which math expression represents the phrase “five less than a number, x” ?

A $x + 5$

B $x ÷ 5$

C $ 5 - x$

D $x - 5$

14. Decide if each of the following phrases CAN or CANNOT be represented by “2x” .

If it CANNOT be represented by “2x” then write the correct way to represent the phrase.

\_\_\_\_\_\_\_\_\_\_double a number, x

\_\_\_\_\_\_\_\_\_\_twice a number, x

\_\_\_\_\_\_\_\_\_\_tripe a number, x

\_\_\_\_\_\_\_\_\_\_the product of 2 & a number, x

\_\_\_\_\_\_\_\_\_\_the square of a number, x

\_\_\_\_\_\_\_\_\_\_the sum of 2 and a number, x

\_\_\_\_\_\_\_\_\_\_the quotient of a number, x, & 2

\_\_\_\_\_\_\_\_\_\_the difference between a

 number, x, & 2

15. Which math expression can NOT represent the phrase

 “the quotient of a number, x, and 4” ?

A 3x

B $x ÷3$

C $\frac{x}{3}$

D Both B and C cannot represent the phrase

16. Solve: $x + 13 = 47$

17. Solve: $6x = 102 $

18. Solve: $\frac{x}{3} = 15$

19. Solve: $4x - 12 = 64 $

20. Solve: $3x + 24 = 126 $

21. What is the value of x in the following equation?

=

x

x

x

x

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22. Solve: $6x + 54 = 12 $

23. Solve: $\frac{x}{12} - 76 = -4$

$$ $$

24. Write an expression to represent each of the following phrases.

“the sum of triple a number, x, and 8”

“three times the sum of a number, x, and 8”

25. Which graph is NOT proportional?

I

II

III

IV

26. Which graph is NOT proportional?

I

II

III

IV