Name: Date:

7.RP EOG Review Block:

1. Each section of fence measures $5\frac{3}{4}$ feet. Each section is $\frac{1}{6}$ of the length of a side of the fence. How long is the side of the fence?

a. 18 feet b. 30 feet

c. $30\frac{3}{4}$ feet d. $34\frac{1}{2}$ feet

2. A cookie recipe requires $\frac{2}{3}$ cup of sugar for $\frac{1}{3}$ batch of cookies. How much sugar is needed for 1 batch of cookies?

a. $\frac{2}{9}$ cup b. 1 cup

c. $1\frac{1}{3}$ cups d. 2 cups

3. John is painting a box that is shaped like a cube. One-eighth of a bottle of paint covers $\frac{3}{4}$ of one face of the box. How many bottles of paint will John need to paint the entire box?

a. $\frac{1}{6}$ b. $\frac{9}{16}$

c. 1 d. 6

4. A painter used $\frac{3}{4}$ of a gallon of paint to cover $\frac{1}{4}$ of a wall. How many gallons of paint will the painter use for the entire wall?

a. $\frac{3}{16}$ b. $\frac{1}{2}$

c. 3 d. 4

5. Jerry ran $\frac{3}{4}$ of a mile in $\frac{3}{20}$ of an hour. What was Jerry’s rate of speed?

a. $\frac{9}{80}$ mph b. $\frac{9}{10}$mph

c. 3 mph d. 5 mph

6. How much money does Janet earn per hour?

a. $7.50 b. $10.00

c. $10.50 d. $15.00

7. A car wash machine cleaned 20 cars in 50 minutes. At this rate, how many minutes will it take the machine to clean 1 car?

a. 0.4 b. 2.5

c. 3 d. 5

8. Belinda recorded the miles she drove and the number of gallons of gasoline she used in the table below. How many miles can Belinda drive on one gallon of gasoline?

|  |  |
| --- | --- |
| **Gallons ofGasoline**  | **Miles Driven**  |
| 8 | 172 |
| 10 | 215 |
| 14 | 301 |

a. 43.0 b. 32.5

c. 21.5

9. The line graph shows the total price of different amounts of gasoline at a gas station for the same price per gallon. Based on the graph, what is the price of 1 gallon of gasoline?

a. $3.07 b. $3.10

c. $3.25 d. $4.00

|  |  |
| --- | --- |
| **Weight**   (pounds)  | **Cost** |
| 3 | $8.37 |
| 6 | $16.74 |
| 9 |  $25.11  |

10. The table below shows the cost of tomatoes, y, based on their weight, in pounds, x. Which equation would calculate the cost of x pounds of tomatoes?

a. $y=3x$ b. $y=2.79x$

c. $y=x+8.37$ d. $y=x+2.79$

|  |  |
| --- | --- |
| **Number of  Songs** (n) | **Cost** (c)   |
| 5 | $7.50 |
| 7 |  $10.50  |
| 13 | $19.50 |

11. The table shows the price of different numbers of downloaded songs. Which equation shows the cost, c, of n number of downloaded songs?

a. $c=0.67n$ b. $c=1.50n$

c. $c=2.00n$ d. $c=3.00n$

12. On a map of North Carolina, 27 centimeters represents 18 miles. Based on the map, which equation would calculate the number of miles between two cities, y, when they measure x centimeters apart?

a. $y=\frac{2}{3}x$ b. $y=\frac{3}{2}x$

c. $y=9x$ d. $y=18x$

|  |  |
| --- | --- |
| **x** | **y** |
| –2 | –8  |
| –1 | –4  |
|  0  | 0 |
| 1 | 4 |
| 2 | 8 |

13. Which equation shows the relationship between the x and y values in the table below?

a. $y=x+4$ b. $y=x-4$

c. $y=4x$ d. $y=-4x$

14. Mary bought a shirt on sale for $15.00. The sales tax was 10%. If Mary paid with a $20 bill, what was her change?

a. $1.50 b. $3.50

c. $4.90 d. $5.00

15. A shirt is on sale for $12.75. This is 15% off the original price. What was the original price of the shirt?

a. $13.00 b. $14.25

c. $14.50 d. $15.00

16. Darlene wants to buy a sweater that originally cost $32. It is on sale for 20% off. Sales tax is 6.75%. What is the final price of the sweater with tax?

a. $23.44 b. $23.87

c. $25.60 d. $27.33

17. The cost of a television was $500. The cost was increased by 10% and then decreased by 10%. What was the final price of the television?

a. $450 b. $495

c. $500

18. Taylor spent $107.96 at the grocery store, before sales tax. Sales tax on food is 2.5%. How much will Taylor pay in sales tax?

a. $2.16 b. $2.50

c. $2.70 d. $3.24

19. The Smith family went out to dinner. The price of the meal was $29.85. The sales tax was 6% of the price of the meal. The tip was 15% of the meal and the sales tax.How much money did the Smith family pay for the meal, including tax and tip?

a. $50.85 b. $36.39 c. $36.12 d. $31.95