Name:_____ Class:_____ Date:_____

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1. What is the unit rate if there are 1,760 Calories in 8 servings?

2. A cheetah can run 70 miles per hour. What is this speed in feet per hour?

3. Which size of yogurt shown in the table has the lowest unit price?

Size (oz)	Cost ($)
6	0.89
8	1.04
10	1.69
32	4.79

4. Kevin can travel $22\frac{1}{2}$ miles in $\frac{1}{3}$ hour. What is his average speed in miles per hour?

5. The table shows the cost for ordering a certain number of pizzas. What is the value of x if the cost is proportional to the number of pizzas ordered?

Pizzas Ordered	2	3	4	5
Cost	$19.98	$29.97	$39.96	x

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6. What is the constant of proportionality of the linear function?

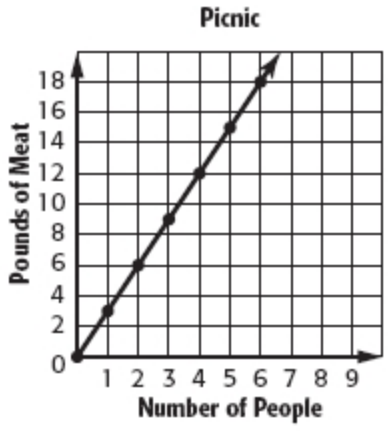
Time, x	1	2	3	4
Cost ($), y	25	50	75	100

7. $\frac{118}{13} = \frac{59}{z}$

8. The table shows the relationship between time and distance. Which graph best represents the data in the table?

Speed	
Time (s)	Distance (m)
1	4
5	20
10	40

9. What is the constant rate of change shown in the graph below?



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10. What is the slope of the line from the table below?

Hour	1	2	4	8
Distance	50	100	200	400

11. What is 138% of 250?

12. What percent of 80 is 8?

13. Yul has lunch at a restaurant. If his bill was $14.50 and Yul wants to leave a 20% tip, what is the amount he should leave for the tip?

What is the total cost or sale price to the nearest cent?

14. $20 haircut; 15% tip

15. $10 lamp; 5% tax

16. $50 tool set; 10% markup

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What is the simple interest paid to the nearest cent for each principal, interest rate, and time?

17. $1,000, 5%, 2 years

18. $850, 4%, 6 months

19. Chaleah deposited $900 in a new account that earns 6% simple interest. After 2 years, how much interest will she have earned?

20. Twenty-four percent of the 25 swim team members are new on the team. How many members are new?

21. Which integer represents 8°C below 0?

22. A turtle dives towards deeper water at a rate of 8 inches per second. It continues for a total of 16 seconds. Which expression represents this situation?

23. Luisa is 43 feet underground touring a cavern. She climbs a ladder up 14 feet. What is her new location?

What is the value of each expression?

24. 8 + (–7)

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25. $18 \div (-9)$

Simplify.

26. $\frac{\frac{3}{4}}{\frac{6}{7}}$

27. What is $\frac{4}{5}$ as a decimal?

28. What is 0.125 as a fraction in simplest form?

29. Make the statement $3\frac{13}{28} \bigcirc 3\frac{17}{30}$ using <, >, or =?

30. It takes Lara $\frac{1}{3}$ hour to walk to the library $\frac{3}{4}$ mile away. What is her walking pace? (Hint: miles/hours)

31. Jeremy and his friends ate $\frac{5}{8}$ of a pie. If the pie was cut into eight pieces, how much pie is left over?

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32. What is the value of $6x - 3y$ if $x = 5$ and $y = -1$?

33. What are the next three terms in the sequence 4, 8, 12, 16, ...?

34. What is the next term in the pattern 0.3, 0.5, 0.7, 0.9, ...?

35. Simplify $x + 4 - 5x - 2$.

36. Factor $15x + 35$ using the GCF.

37. Add $(11x + 2) + (9x - 4)$.

38. Subtract $(8x + 6) - (x + 4)$.

39. What is $-2y + 10 + 2y - 8$ simplified?

40. Which expression is equivalent to $-5(x + 10)$?