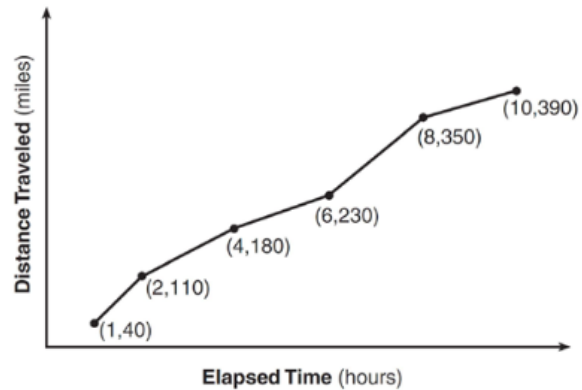


- _____ 1. The Jamison family kept a log of the distance they traveled during a trip, as represented by the graph below.



During which interval was the average speed the greatest?

- A. The first hour to the second hour
 B. The second hour to the fourth hour
 C. The sixth hour to the eighth hour
 D. The eighth hour to the tenth hour
- _____ 2. Which of the following is an expression of the fifth degree with a leading coefficient of seven and a constant of six?
- A. $6x^5 + x^4 + 7$
 B. $7x^6 - 6x^4 + 5$
 C. $6x^7 - x^5 + 5$
 D. $7x^5 + 2x^2 + 6$

- _____ 3. Tim ate four more cookies than Alice. Bob ate twice as many cookies as Tim. If x represents the number of cookies Alice ate, which expression represents the number of cookies Bob ate?

- A. $2 + (x + 4)$
 B. $2x + 4$
 C. $2(x + 4)$
 D. $4(x + 2)$

- _____ 4. If the point $(5, k)$ lies on the line represented by the equation $2x + y = 9$, the value of k is?

- A. 1
 B. 2
 C. -1
 D. -2

- _____ 5. A cell phone can receive 120 messages per minute. At this rate, how many messages can the phone receive in 150 seconds?

- A. 48
 B. 75
 C. 300
 D. 18,000

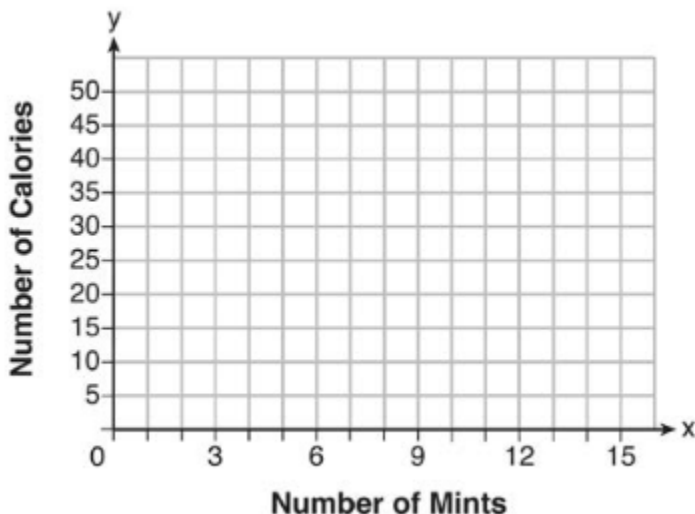
Short Answer

Please show all work on a separate piece of paper and/or graph paper.

- Tom drove 290 miles from his college to home and used 23.2 gallons of gasoline. His sister, Ann, drove 225 miles from her college to home and used 15 gallons of gasoline. Whose vehicle had better gas mileage? Justify your answer.
- What is an equation of the line that passes through $(-2, 3)$ and $(6, -1)$.
- Connor wants to attend the town carnival. The price of admission to the carnival is \$4.50, and each ride costs an additional 79 cents. If he can spend at most \$16.00 at the carnival, write and solve an inequality to determine the maximum number of rides he can go on.
- The graph of a linear equation contains the points $(3, 11)$ and $(-2, 1)$. Is the point $(2, 9)$ also on the line? Justify your answer.
- Write a linear equation in terms of x and $f(x)$ where $f(-2) = -6$. Justify your answer mathematically.
- What is the value of x in the equation: $13x - 2(x + 4) = 8x + 1$?

Do #12 on this worksheet

- Max purchased a box of green tea mints. The nutrition label on the box stated that a serving of three mints contains a total of 10 Calories. On the axes below, graph the function, C , where $C(x)$ represents the number of Calories in x mints.



Write an equation that represents $C(x)$.

A full box of mints contains 180 Calories. Use the equation to determine the total number of mints in the box.