

Name _____

Algebra 1 B Teacher _____

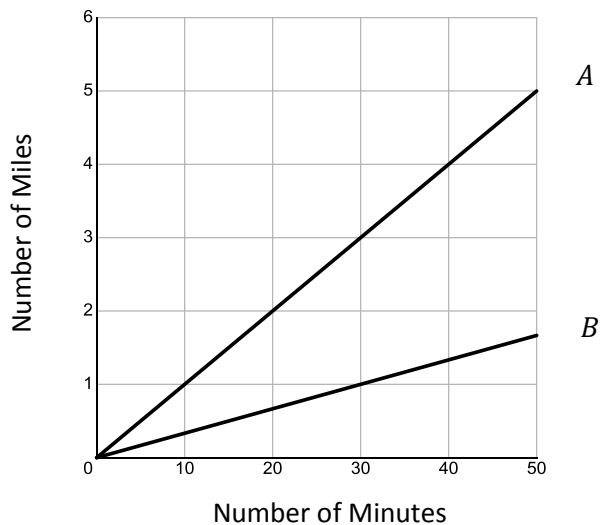
Unit 5 Enrichment Assignment

DIRECTIONS: Answer each of the questions in this packet and **SHOW YOUR WORK**. You may use your notes, ask questions, work with another student, or go to the math lab to get help on this. You will be given a quiz based on these questions in which you will have to explain or interpret your answers. You may want to write notes on each problem as to what you did to get your answer.

Use this space to show work.

- What is the y -intercept of a line that passes through the point $(8, -12)$ and has a slope of $-\frac{3}{4}$?
A. -6 B. -4
C. 2 D. -1

- During a 50 minute lunch period, Albert (A) went running while Bill (B) walked for exercise. Their times and distances are shown in the graph below. How much faster was Albert running than Bill was walking, in miles per hour?



- 2 miles per hour B. 4 miles per hour
- 6 miles per hour D. 8 miles per hour

Use this space to show work.

3. The table below represents a linear relationship between x and y . Which equation correctly represents this relationship?

x	y
2	1
3	3
5	7
7	11

- A. $y = x + 2$ B. $y = 2x + 2$
C. $y = 2x + 3$ D. $y = 2x - 3$
4. Rick is considering joining a golf club. If he joins, he pays an annual membership fee of \$900 and a greens fee of \$30 each time he plays a game of golf. If he does not join, he pays a greens fee of \$75 each time he plays a game of golf. What is the minimum number of games Rick must play so that joining the club will be cheaper than not joining the club?

- A. 19 B. 20
C. 21 D. 22

5. Which lines are parallel?

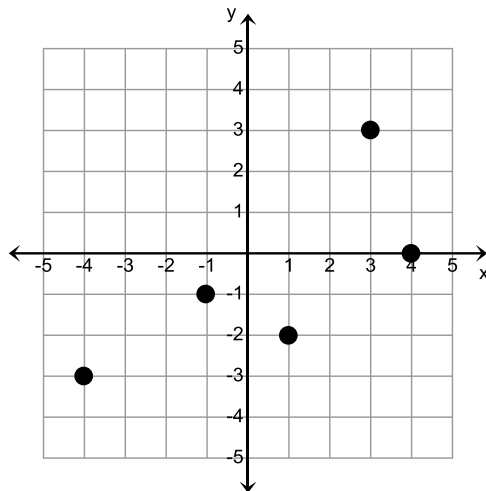
- A. $3x - y = 6$ and $y = -3x + 4$ B. $x - 4y = 8$ and $y = -4x - 2$
C. $5x + 2y = -1$ and $y = -\frac{5}{2}x + 3$ D. $2x + 3y = 7$ and $y = \frac{3}{2}x + 5$

Use this space to show work.

6. A company builds computers. It cost \$6,700 to build 10 computers and \$12,200 to build 20 computers. Which equation represents the cost, C , to build x number of computers?

- A. $C = 550x - 1200$ B. $C = 550x + 1200$
C. $C = 1200x + 550$ D. $C = 1200x - 550$

7. Given the points, which statement is true?



- A. Domain = $\{-4, -1, 1, 3, 4\}$ B. Domain = $\{-4, -1, 1, 3, 4\}$
Range = $\{-3, -2, -1, 0, 3\}$ Range = $\{-3, -2, -1, 0, 3\}$
Not a function Is a function
- C. Domain = $\{-3, -2, -1, 0, 3\}$ D. Domain = $\{-3, -2, -1, 0, 3\}$
Range = $\{-4, -1, 1, 3, 4\}$ Range = $\{-4, -1, 1, 3, 4\}$
Not a function Is a function

8. Which number is a solution of the inequality

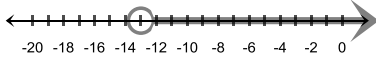
$$3x - 2(4 + 3x) \geq 6?$$

- A. -5 B. -4
C. 4 D. 5

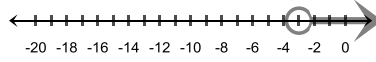
Use this space to show work.

9. Which graph represents the solution set of the inequality
 $7 - 5n < -3n + 13$?

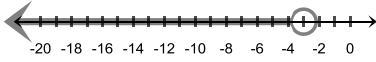
A.



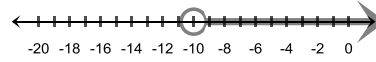
B.



C.



D.



10. Find the value of x so that the mean of the numbers is 130.

104, 137, 154, 131, x

A. 124

B. 125

C. 127

D. 122