Name: _____ Date: _____

BLM 6.PT.1

Chapter 6 Practice Test

Multiple Choice

For each question, select the best answer.

1. Which are the slope and y-intercept of the line $y = 5x + 3$?

A $m = 3,\ b = 5$

B $m = -3,\ b = -5$

C $m = -5,\ b = 3$

D $m = 5,\ b = 3$

2. What are the x- and y-intercepts of the line $5x - 4y = 20$?

A x-intercept = 4, y-intercept = –5

B x-intercept = –4, y-intercept = –5

C x-intercept = –4, y-intercept = 5

D x-intercept = 4, y-intercept = 5

3. What is the slope of a line parallel to $x + 2y = 4$?

A 2 **B** –2

C $\frac{1}{2}$ **D** $-\frac{1}{2}$

4. What is the slope of a line perpendicular to $x + 2y = 4$?

A 2 **B** –2

C $\frac{1}{2}$ **D** $-\frac{1}{2}$

5. Which is the solution to the linear system $y = 6 - x$ and $y = x - 4$?

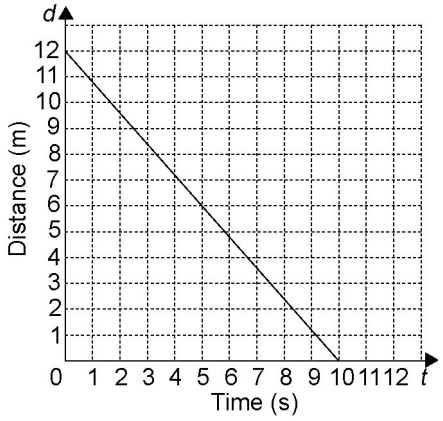
A (1, 5) **B** (5, 1)

C (–1, 5) **D** (–5, –1)

Short Response

6. Rearrange $x - 2y + 4 = 0$ into the form $y = mx + b$.

7. Erynn used a motion sensor to create this distance-time graph.



a) Find the slope and d-intercept. What information does each of these give us about Erynn's motion?

b) Write an equation that describes this distance-time relationship.

8. Find an equation for a line

a) with slope –1 passing through (2, 2)

b) that passes through (10, 3) and (5, 6)

Extend

Show all your work.

9. A line is perpendicular to $x + 3y - 4 = 0$ and has the same y-intercept as $2x + 5y - 20 = 0$. Find an equation for the line.

10. A fitness club offers two membership plans.
Plan A: \$30 per month
Plan B: \$18 per month plus \$2 for each visit to the club

a) Graph the linear system. When would the cost of the two membership plans be the same?

b) Describe a situation under which you would choose each plan.