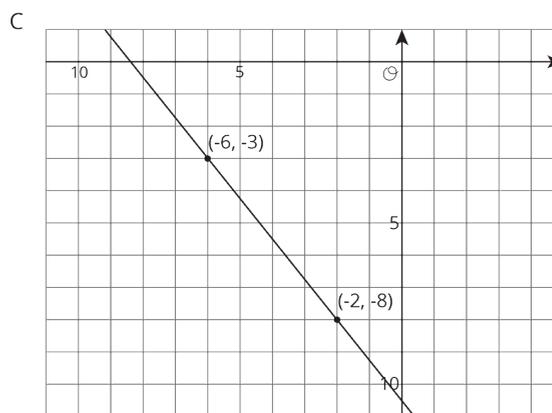
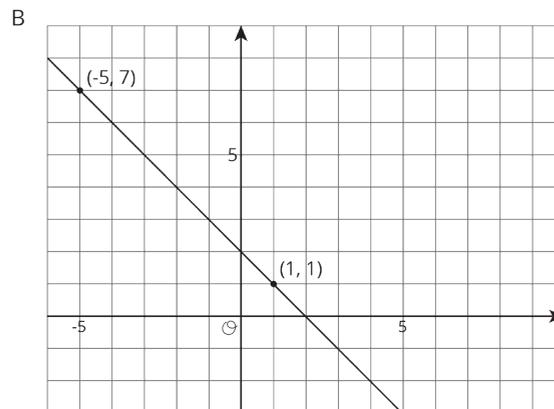
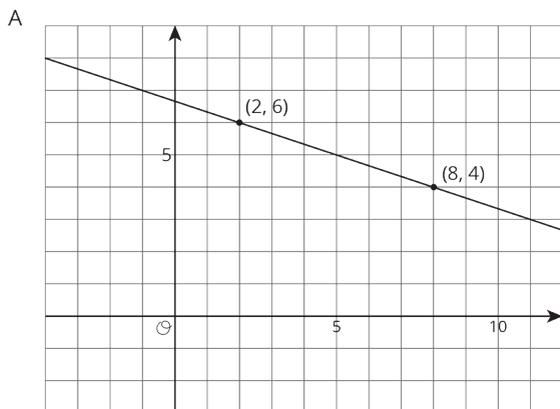


## Lesson 9 Practice Problems

1. For each graph, calculate the slope of the line.



2. Match each pair of points to the slope of the line that joins them.

A. (9, 10) and (7, 2)

1. 4

B. (-8, -11) and (-1, -5)

2. -3

C. (5, -6) and (2, 3)

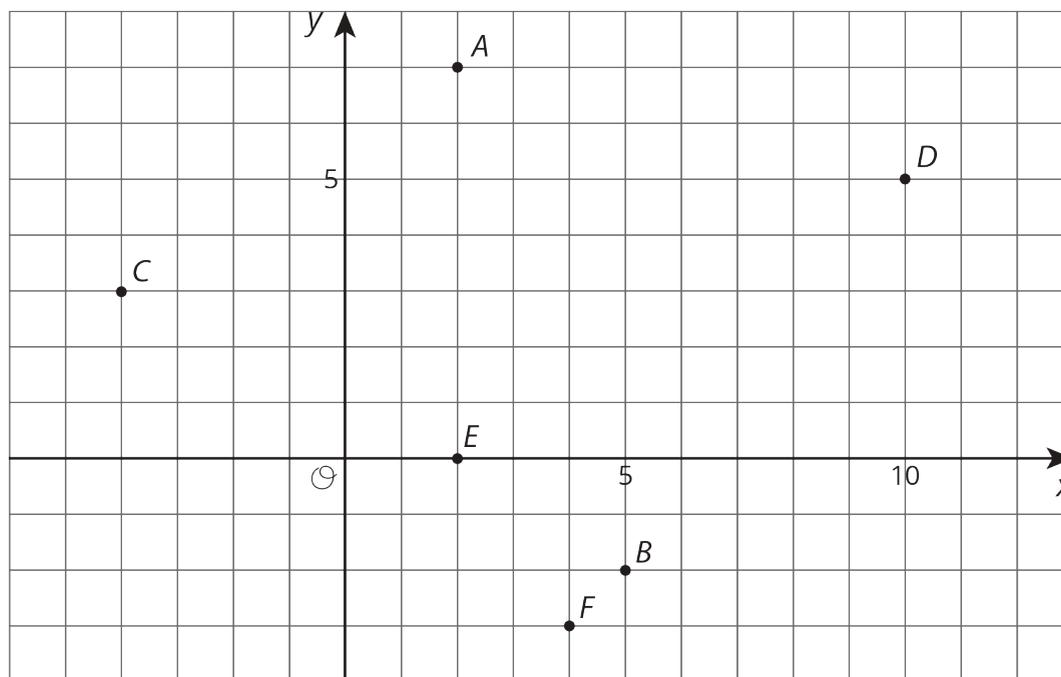
3.  $-\frac{5}{2}$

D. (6, 3) and (5, -1)

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

E. (4, 7) and (6, 2)

3. Draw a line with the given slope through the given point. What other point lies on that line?

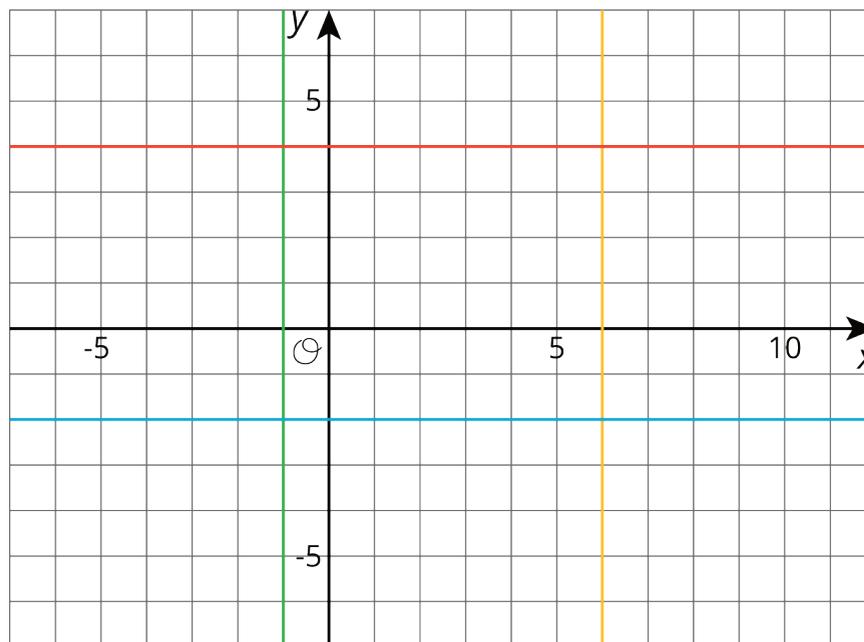


- a. Point A, slope =  $-3$
- b. Point A, slope =  $-\frac{1}{4}$
- c. Point C, slope =  $-\frac{1}{2}$
- d. Point E, slope =  $-\frac{2}{3}$

4. Suppose you wanted to graph the equation  $y = -4x - 1$ .

- a. Describe the steps you would take to draw the graph.
- b. How would you check that the graph you drew is correct?

5. Write an equation for each line.



6. A publisher wants to figure out how thick their new book will be. The book has a front cover and a back cover, each of which have a thickness of  $\frac{1}{4}$  of an inch. They have a choice of which type of paper to print the book on.

- a. Bond paper has a thickness of  $\frac{1}{4}$  inch per one hundred pages. Write an equation for the width of the book,  $y$ , if it has  $x$  hundred pages, printed on bond paper.
- b. Ledger paper has a thickness of  $\frac{2}{5}$  inch per one hundred pages. Write an equation for the width of the book,  $y$ , if it has  $x$  hundred pages, printed on ledger paper.
- c. If they instead chose front and back covers of thickness  $\frac{1}{3}$  of an inch, how would this change the equations in the previous two parts?

(From Unit 5, Lesson 6.)