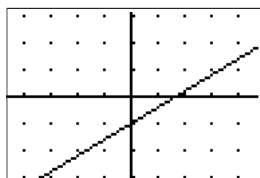


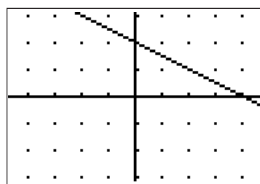
Section 2.3

Find the slope of the lines shown. The scale is one unit on both axes.

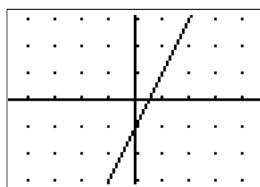
1.



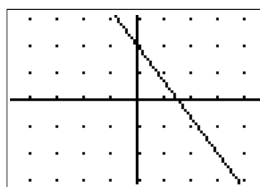
2.



3.



4.



Find the slope and the y-intercept of the linear data shown in the tables.

4.

x	-3	0	3	6
$f(x)$	2	-2	-6	-10

5.

x	-1	0	2	5
$f(x)$	-9	-5	3	15

6.

X	Y1	
-2	6	
0	3	
2	0	
4	-3	
6	-6	
8	-9	
10	-12	
X = -2		

7.

X	Y1	
-2	-4	
-1	-2	
0	0	
1	4	
2	10	
3	14	
4	24	
X = -2		

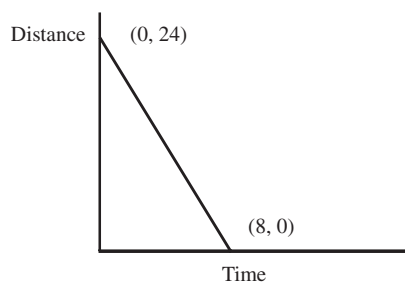
For 8-9: Find the slope and y-intercept of the line. Then graph the equation.

8. $y = 4x - 3$

9. $y = -\frac{1}{3}x - 1$

For 10 and 11: Sketch a line passing through the given point with slope m .

10. $(-3, 2)$, $m = -2$
11. $(-2, -4)$, $m = \frac{5}{3}$
12. Sam sells textbooks for a company. He makes \$750 a week plus 10% of the total sales of the books he sells.
- Write an equation for the amount Sam makes in a week if the total sales are s .
 - What is the slope of the equation? Interpret its meaning in the context of the problem.
 - What is the y -intercept? Interpret its meaning in the context of the problem.
13. Cynthia is registering for classes at the local college. She has fixed fees of \$75. Tuition costs \$125 per credit hour.
- Write an equation for the total amount Cynthia will have to pay for c credit hours.
 - What is the slope of the equation? Interpret its meaning in the context of the problem.
 - What is the y -intercept? Interpret its meaning in the context of the problem.
14. Consider the graph below. Time in seconds is graphed on the x -axis and distance in feet is graphed on the y -axis. The graph shows Alicia's distance from her car as a function of time. Which sentence is a good match for the graph?
- Alicia stood 8 feet from her car and moved toward it, reaching it after 24 seconds.
 - Alicia stood 24 feet from her car and moved toward it a rate of 4 feet per second.
 - Alicia stood 24 feet from her car and moved toward it, reaching it after 8 seconds.
 - Alicia stood 8 feet from her car and moved away from it, stopping when she was 24 feet away.



15. Which of the tables shown describes the graph in problem 14?

A)

time	distance
0	24
2	16
4	8
6	0
8	0

B)

time	distance
0	24
2	18
4	12
6	6
8	0

C)

time	distance
0	24
2	18
4	11
6	3
8	0

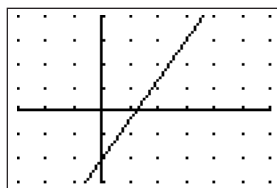
16. Using the graph from problem 14, find the slope of the line shown (including units). Interpret the slope in the context of the problem.

For 17 and 18: Write the equation of the lines shown.

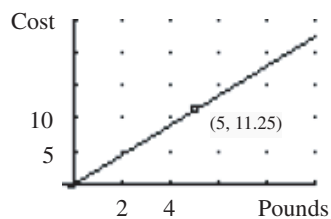
17.



18.



19. The graph shows the cost of buying a turkey that weighs x pounds. Find the slope of the graph and interpret the result.



20. Sketch a graph that illustrates the following scenario where the input is time in minutes and the output is the student's distance from his classroom.

A student leaves his algebra class and slowly starts to walk to his car. After 3 minutes the student sees a friend and stops to talk for 5 minutes. Then, the student realizes that he forgot his calculator in the classroom so he hurries back to the room.