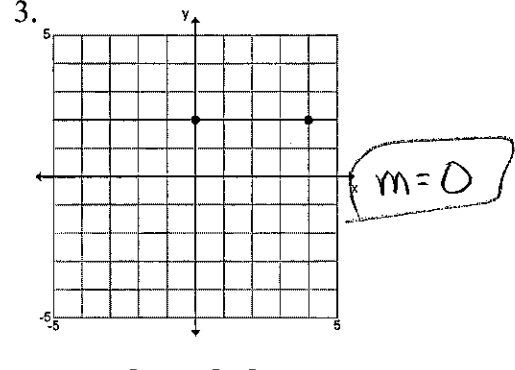
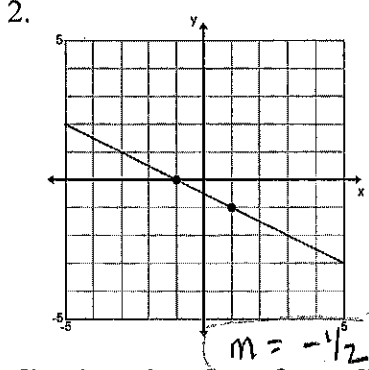
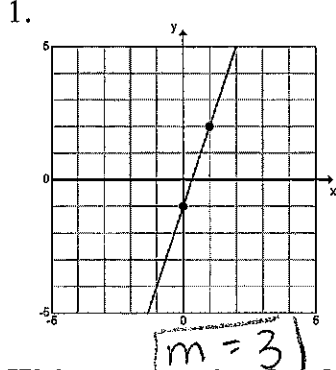


Chapter 3 Practice Test

Find the slope of the line.



Write an equation for the line in point-slope form that passes through the two points.

4. (2, 2), (3, 1)

$$\frac{1-2}{3-2} = \frac{-1}{1}$$

$y - 2 = -1(x - 2)$   
or  $y - 1 = -1(x - 3)$

5. (-1, 2), (0, 5)

$$\frac{5-2}{0-1} = \frac{3}{-1}$$

$y - 2 = 3(x + 1)$   
or  $y - 5 = 3(x - 0)$

6. (-3, -2), (-3, 2)

$$\frac{2-(-2)}{-3-(-3)} = \frac{4}{0}$$

No Slope

7.  $y = -2x + 3$

$m = -2$

8.  $x = 10$

no slope

9.  $2x - 4y = 16$

$$-4y = -2x + 16$$

$$y = \frac{1}{2}x - 4$$

$m = \frac{1}{2}$

Write an equation in slope-intercept form from the given information. ( $y = mx + b$ )

10. slope: -5, y-intercept: 15

$y = -5x + 15$

11.  $4x + 6y = 24$

$$6y = -4x + 24$$

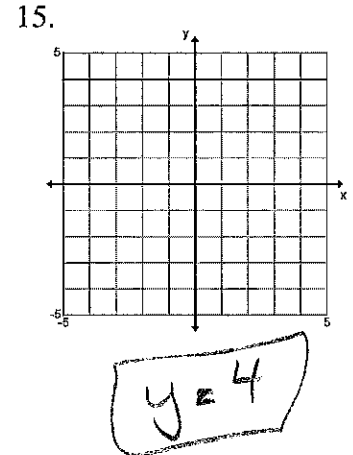
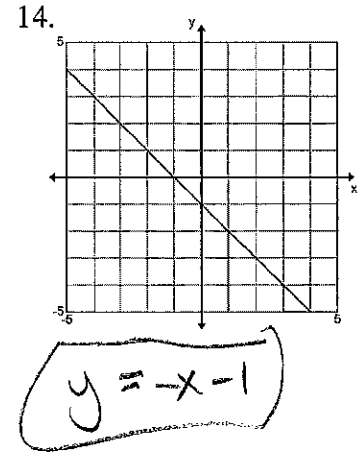
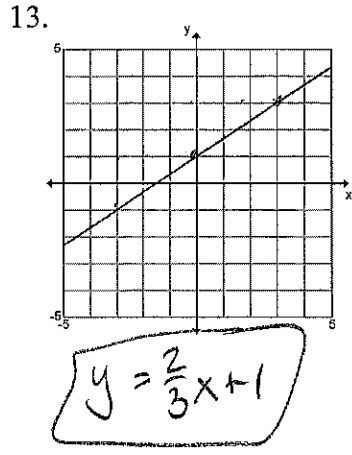
$$y = -\frac{2}{3}x + 4$$

12.  $y + 3 = 2(x - 1)$

$$y + 3 = 2x - 2$$

$$y = 2x - 5$$

Write an equation of the line shown in each graph in slope-intercept form. ( $y = mx + b$ )



Tell whether y varies directly with x. Then find the rate of change. Remember to label!

16.

Hour (x)	# of Texts (y)
2	3
5	12
9	24
12	33

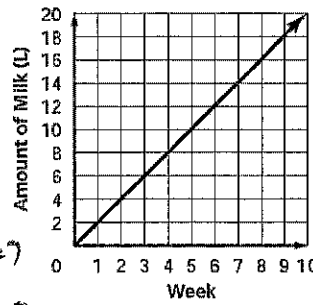
$\frac{3}{2} = 1.5$   
 $\frac{12}{5} = 2.4$   
 $\frac{24}{9} = 2.6$   
 $\frac{33}{12} = 2.75$

17.

Month (x)	# of Bikes produced (y)
0	0
3	21
6	42
9	63
12	84

$\frac{21}{3} = 7$   
 $\frac{42}{6} = 7$   
 $\frac{63}{9} = 7$   
 $\frac{84}{12} = 7$

18.



yes - y varies directly w/ x  
 2 L milk per week

No - y varies directly w/ x  
 3 text message per hour

yes - y varies directly w/ x  
 7 bikes produced per month

Write an equation in slope-intercept for the given situation.

19. A video game rental company charges their members \$15.35 per month plus \$0.75 for every rental.

$C = 0.75r + 15.35$

20. A gym membership charges \$30 a month plus \$1 for every hour you are there.

$C = 1h + 30$

Use the points (3, -2) and (6, 1) to answer questions 21-27.

21. Write an equation for the line that goes through the points in point-slope form.

$y + 2 = 1(x - 3)$  or  
 $y - 1 = 1(x - 6)$

22. Write an equation for the line in slope-intercept form.

$y = x - 5$

23. Write an equation for the line in standard form.

$x - y = 5$

24. What is the slope of the line?

$m = \frac{1 - (-2)}{6 - 3} = \frac{3}{3} = 1$

25. What are the x and y intercepts of the line?

(5, 0) (0, -5)

26. What could the equation of a parallel line be?

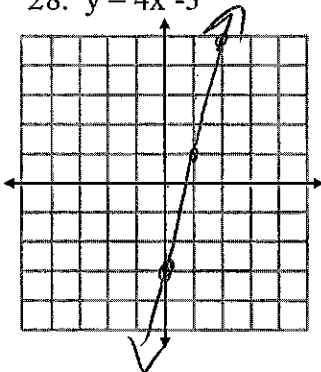
$y = x + 15$  any # but -5

27. What could the equation of a perpendicular line be?

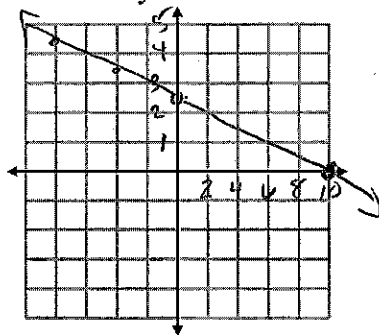
$y = -x + 12$  any #

Graph each equation.

28.  $y = 4x - 3$

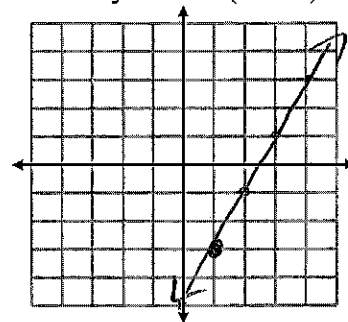


29.  $x + 4y = 10$



(10, 0)  
 (0, 2.5)

30.  $y + 3 = 2(x - 1)$



(1, -3)  
 m = 2