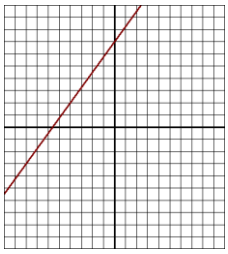
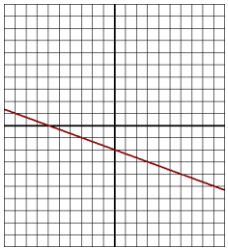
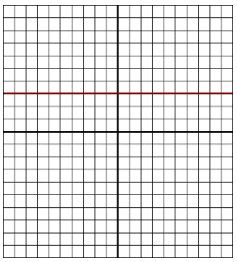
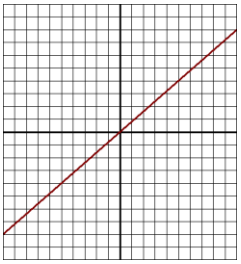
Worksheet 1.3B

Write an equation in slope-intercept form for each graph.

1. 

2. 

3. 

4. 

State the slope and y-intercept of the graph of each equation.

5. $y = 2x - 5$

6. $2y = 4x + 6$

7. $3x + 2y = 10$

8. $y = cx + d$

Write an equation in slope-intercept form that satisfies each condition.

9. $m = -7, b = -3$

10. $slope = 0.5, passes\ through\ (6,4)$

11. $slope = 4, passes\ through\ origin$

12. $passes\ through\ (-2,5)\ and\ (3,1)$

13. $m = \frac{2}{3}$, passes through $(4,6)$

14. x-intercept $= -4$, y-intercept $= 4$

15. $m = \frac{1}{3}$ and passes through $(-2,0)$

16. $passes\ through\ (-2,-3)\ and\ (0,0)$

Use a graphing calculator to find an equation of the line.

17.

x	*y*
5	27
9	49
2	17
4	35
12	56
8	41
7	36

18.

x	*y*
12	125
6	67
14	138
9	98
11	114
15	162
10	103

Solve each system of equations by using the SUBSTITUTION method.

19. $2x + 3y = 7$
$5x + y = -2$

20. $3x - 2y = 16$
$x + 4y = -18$

Solve each system of equations by using the ELIMINATION method.

21. $4x - 2y = 4$
$3x + 5y = 29$

22. $2x - 3y = 13$
$-4x + 6y = 9$

In the system of equations below, *k* is a constant. For what value of *k* will there be infinitely many solutions (*x*,*y*) to the system of equations.

23. $3x + 4y = 12$
$9x + ky = 36$