

Worksheet 10-5.B Parallel and Perpendicular Lines Name _____

Find: a) the slope of a line parallel to the graph of each equation.
b) the slope of a line perpendicular to the graph of each equation.

1. $4x - 5y = 12$

2. $y = \frac{2}{7}x + 1$

3. $x = -4$

4. $y = -\frac{1}{2}x + 10$

5. $-5x + 5y = 3$

6. $-x + 3y = 6$

Write an equation for the line that is:

a) parallel to the given line and that passes through the given point.
b) perpendicular to the given line and that passes through the given point.

10. $(6, 4)$ $y = 3x - 2$

11. $(-5, 5)$ $y = -5x + 9$

12. $(-1, -4)$ $y = \frac{1}{6}x + 1$

13. $(1, 1)$ $y = -\frac{1}{4}x + 7$

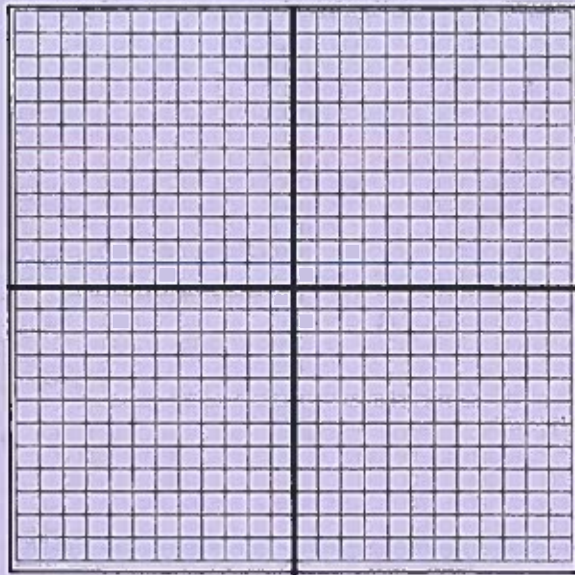
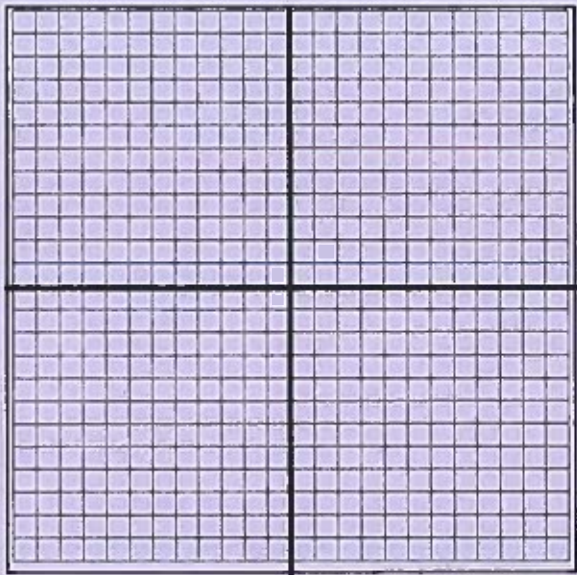
14. $(12, -6)$ $y = 4x + 1$

15. $(0, -3)$ $y = -\frac{4}{3}x - 7$

Write an equation that is parallel to the given line through the given point and verify by graphing both lines.

16. $(3, 4)$ $y = 2x - 7$

17. $(1, 3)$ $-7x - 3y = 3$



Write an equation that is perpendicular to the given line through the given point and verify by graphing both lines.

18. $(-5, 5)$ $y = -5x + 9$

19. $(1, 1)$ $3x - 5y = 10$

