

Name key

Date _____

LESSON 2.4 Practice B
For use with pages 98-104

Examples:

For each slope given, find the slope of the line that is parallel and perpendicular.

1. $m = 2$ $\parallel = 2$ $\perp = -\frac{1}{2}$ 2. $m = 4$ $\parallel = 4$ $\perp = -\frac{1}{4}$ 3. $m = -5$ $\parallel = -5$ $\perp = \frac{1}{5}$

Write an equation of the line that passes through the given point and satisfies the given condition.

10. $(-2, 3)$; parallel to $y = 4x - 3$ $y = 4x + 11$
 11. $(3, 7)$; parallel to $y = -3x + 6$ $y = -3x + 16$
 12. $(-1, -4)$; perpendicular to $2y = 4x + 10$ $y = -\frac{1}{2}x - \frac{9}{2}$
 13. $(6, -2)$; perpendicular to $y + 7 = -5x$ $y = \frac{1}{5}x - \frac{16}{5}$

LESSON 2.5 Practice B
For use with pages 107-111

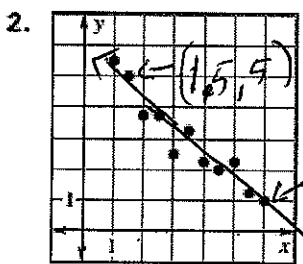
Examples:

The variables x and y vary directly. Write an equation that relates x and y . Then find y when $x = 0$.

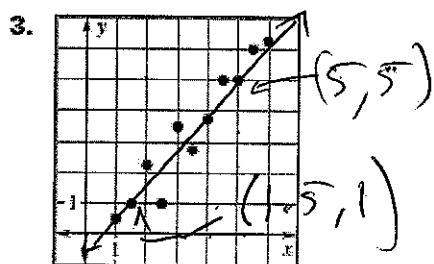
4. $x = 6, y = -8$ $y = -\frac{4}{3}x, 0$ 5. $x = -4, y = -16$ $y = 4x, 0$ 6. $x = 2, y = 14$ $y = 7x, 0$
 7. $x = -4, y = -20$ $y = 5x, 0$ 8. $x = 12, y = -4$ $y = -\frac{1}{3}x, 0$ 9. $x = 7, y = 4$ $y = \frac{4}{7}x, 0$

LESSON 2.6 Practice A
For use with pages 112-120

Given the scatter plot, write an equation of a line that best fits the data.



$\frac{5-1}{1.5-6} = \frac{4}{-4.5} \approx -\frac{8}{9}$ About
 $y = -\frac{8}{9}x + \frac{19}{3}$



$y = \frac{8}{7}x - \frac{19}{7}$ About

Graph the function.

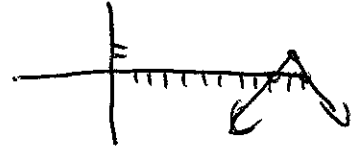
1. $y = -2|x|$



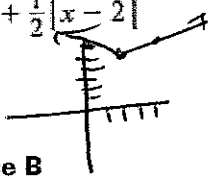
2. $f(x) = 2|x-1| - 3$



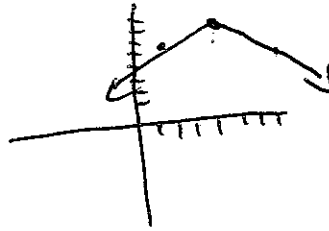
3. $y - 2 = -|x - 10|$



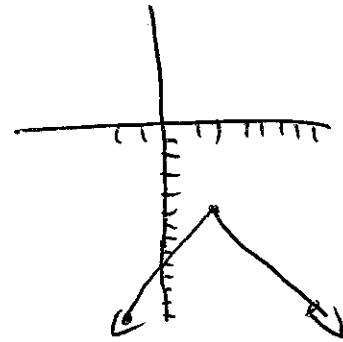
4. $f(x) = 5 + \frac{1}{2}|x-2|$



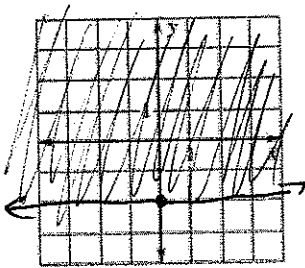
5. $3y - 24 = -2|x - 4|$



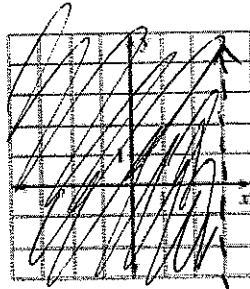
6. $f(x) = -\frac{8}{5}|x-2| - 5$



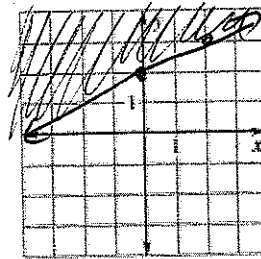
10. $y \geq -2$



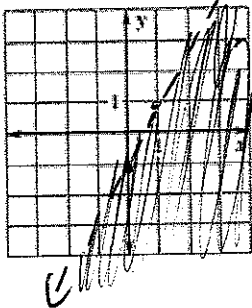
11. $x < 3$



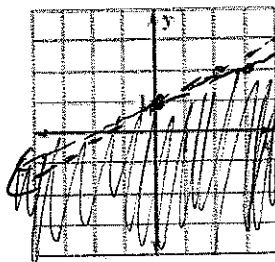
14. $y \geq \frac{1}{2}x + 2$



13. $y < 2x - 1$



17. $x - 3y > -3$



18. $-6x - 2y \leq 4$

