

8.6 Parallel/Perpendicular Lines

Determine if these pair of lines are parallel (\parallel), perpendicular (\perp) or neither.

1. $y - 3 = 6(x + 3)$
 $6y = x + 12$

2. $5x - y = 10$
 $y = -\frac{1}{5}x + 4$

3. $3y = 2x + 10$
 $2x - 3y = 15$

4. $y + 12 = -5(x - 2)$
 $5x + y = 4$

5. $3x - 4y = 18$
 $y = -\frac{3}{4}x$

6. $2y = 8x - 10$
 $y - 4 = -\frac{1}{4}(x + 6)$

Write a perpendicular line to:

7. $y = -4x + 5$ thru $(-2, 3)$ in standard form

8. $y + 3 = \frac{1}{2}(x - 9)$ thru $(5, 2)$ in standard form

9. $x = 5$ thru $(-9, 10)$

10. $y = -3$ thru $(-2, -7)$

11. $4x - 2y = 11$ thru $(4, -1)$ in slope intercept form

12. $y = 6x - 3$ thru $(-6, -4)$ in point-slope form

13. $8x - 2y = 11$ thru $(9, 1)$ in point-slope form