

Parallel and Perpendicular Lines

For each pair of equations below, decide if they are parallel, perpendicular, or neither.

1. $y = 2x + 9$

$$y = 2x + 8$$

2. $y = 4x - 2$

$$y = -4x + 5$$

3. $y = \frac{2}{4}x$

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

4. $y = \frac{1}{9}x + 12$

$$y = \frac{-9}{1}x - 8$$

5. $y = 7x + 4$

$$y = 7x - 10$$

6. $y = 4x + 9$

$$y = 2x + 9$$

7. $y = \frac{1}{7}x - 8$

$$y = -7x + 2$$

8. $y = \frac{1}{3}x + 5$

$$y = \frac{1}{3}x - 4$$

9. $y = \frac{5}{6}x + 7$

$$y = -\frac{6}{5}x + 5$$

10. $y = \frac{1}{4}x + 9$

$y = -\frac{4}{1}x + 7$

11. $y = 3x - 2$

$y = 3x + 5$

12. $y = \frac{2}{4}x + 9$

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

13. $y = \frac{3}{4}x + 12$

$y = \frac{4}{3}x - 8$

14. $y = 8x + 3$

$y = 8x - 12$

15. $y = 9$

$x = 7$

16. $y = -8$

$y = -5$

17. $y = \frac{2}{6}x + 5$

$y = \frac{1}{3}x - 4$

18. $y = 9 + 3x$

$y = 4 + 3x$