

8.6 Parallel and Perpendicular Lines

Name _____

- Parallel: Lines that have the same slope
- Perpendicular: Lines \perp that have negative reciprocals for slopes

$$y + 5 = 6(x - 8)$$

$$y - 2 = 3(x + 7)$$

$$y + 5 = 6(x - 8)$$

$$y = 6x - 10$$

$$y = -\frac{1}{3}x - 10$$

$$y = -\frac{1}{3}x - 10$$

(2, 1) and (7, 3) with (10, 1) and (8, 6)

(3, -2) and (3, 7) with (-4, 2) and (4, 2)

(2, -5) parallel to $y + 5 = 6(x - 8)$

(2, -5) perpendicular to $y + 5 = 6(x - 8)$

(2, -5) parallel to $y = 3$

(2, -5) perpendicular to $y = 3$

(2, -5) parallel to $x = -8$

(2, -5) perpendicular to $x = -8$