

169 1-6 289 4-10 / 13

1. \perp
2. neither
3. \perp
4. \parallel
5. one set is (2,5) and (7,10)
6. one set is (1,5) and (-2,-12)

4. $y = -x + 2$

5. $y = -\frac{6}{13}x + \frac{74}{13}$

6. $y = x + 1$

7. $y = -3x + 5$

8. $y = \frac{2}{5}x - \frac{8}{5}$

9. $y = 80 + 4x$

10. $y = -3x + 26$

Warm up:

WRITE AN EQUATION FOR THE
LINE PERPENDICULAR TO $y = 4x + 5$,
AND PASSING THROUGH $(0, -3)$.

$$m = -\frac{1}{4}$$

$$y = mx + b$$

$$-3 = -\frac{1}{4}(0) + b$$

$$-3 = b$$

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

#5) $(-5, 8)$ $(8, 2)$
 $m = \frac{-6}{13}$

$$y = mx + b$$

$$2 = -\frac{6}{13}(8) + b$$

$$2 = -\frac{48}{13} + b$$

$$\frac{26}{13} + \frac{48}{13} = b$$

$$\frac{74}{13} = b$$

$$y = -\frac{6}{13}x + \frac{74}{13}$$