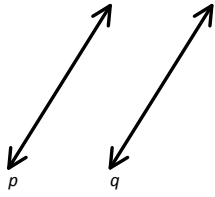


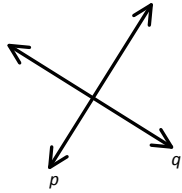
Parallel and Perpendicular Lines

Parallel Lines



$$p \parallel q$$
$$m_p = m_q$$

Perpendicular Lines



$$p \perp q$$

$$m_p = \frac{3}{2}$$

$$m_p = -2$$

$$m_p = 1$$

$$m_p = 0$$

1. Find the slope of a line that is parallel and perpendicular to the given line.

a) $2x + 5y = 10$

b) $-\frac{1}{6}x - 3y = 7$

c) $y = 4$

2. Write the equation of the line in slope-intercept form that passes through the point $(2, 3)$ and is parallel to $3y = -6x + 12$.

3. Write the equation of the line in slope-intercept form that passes through the point $(-2, 4)$ and is perpendicular to $5x + 2y = -10$.