

M10 - 7.5 - Parallel and Perpendicular Slope HW

Find the parallel and perpendicular slope to the following slopes.

$$m = 2$$

$$m = -3$$

$$m = \frac{-1}{2}$$

Parallel: $m = 2$

Perpendicular: $m = -\frac{1}{2}$

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

$$m = 0$$

$$m = \textit{undefined}$$

Find the slope of the line, and the slope of the line parallel and perpendicular to it.

$$y = \frac{3}{4}x + 7$$

$$2x + 3y = 5$$

$$y - 2 = 3(x - 4)$$

$$y = 5$$

$$x + 2 = 0$$

$$y + 1 = -\frac{1}{2}(x + 2)$$

A line passes through (1,7) and (-3,-1). What is the slope of a line parallel and perpendicular to this line.

M10 - 7.5 - Parallel/Perpendicular Lines HW

Find the value of "p" if the lines are parallel, and if the lines are perpendicular.

$$m = \frac{p}{5}, m = 2$$

Parallel

Perpendicular

$$m = \frac{8}{p}, m = \frac{-1}{2}$$

Parallel

Perpendicular

Are the following parallel, perpendicular, or neither?

$$y = -2x + 1$$
$$y = 2x + 4$$

$$y = 3x + 5$$
$$y = \frac{-1}{3}x - 2$$

$$y = x + 9$$
$$y = x + 2$$

Find the equation parallel to the following line, passing through the following point.

$$y = 2x + 1, (3, 5)$$

Find the equation perpendicular to the following line, passing through the following point.

$$y = 3x + 2, (6, -3)$$