

Perpendicular and Parallel Lines

Find the equation in point-slope form of the line **parallel** to the given line through the point

| | | |
|--------------|----------|-------|
| $y = 3x - 2$ | $(0, 3)$ | $m =$ |
|--------------|----------|-------|

| | | |
|----------------|-----------|-------|
| $2x + 3y = 12$ | $(-3, 1)$ | $m =$ |
|----------------|-----------|-------|

Find the equation in point-slope form of the line **parallel** to the given line through the point

$$y = \frac{-2}{3}x - 10$$

$(2, -3)$

$m =$

$$3x + 5y = 10$$

$(5, -1)$

$m =$

Find the equation in point-slope form of the line **perpendicular** to the given line through the point

| | | |
|--------------|----------|-------|
| $y = 3x - 2$ | $(0, 3)$ | $m =$ |
|--------------|----------|-------|

| | | |
|----------------|-----------|-------|
| $5x + 2y = 14$ | $(-3, 1)$ | $m =$ |
|----------------|-----------|-------|

Find the equation in point-slope form of the line **perpendicular** to the given line through the point

$$y = \frac{3}{5}x - 10$$

$(-2, 7)$

$m =$

$$5x + 6y = 12$$

$(-9, -5)$

$m =$