

Point-Slope Form of a Line

1. Find the equation of the line that contains the given point and with the given slope. Write the equation in slope-intercept form and graph the line

$$(1,2); \text{slope} = 3$$

2. Find the equation of the line that contains the given point and with the given slope. Write the equation in slope-intercept form and graph the line

$$(-5,1); \text{slope} = \frac{-3}{2}$$

3. Find the equation of the line that contains the given point and with the given slope. Write the equation in slope-intercept form and graph the line

$$(4,1); \text{undefined slope}$$

4. Find the equation of the line that contains the given point and with the given slope. Write the equation in slope-intercept form and graph the line

$$(-2,-3); \text{slope} = 0$$

5. Find the equation of the line that contains the given point and satisfies the given information. Write the equation in slope-intercept form, if possible.

Horizontal line that contains $(-4, -5)$

6. Find the equation of the line that contains the given point and satisfies the given information. Write the equation in slope-intercept form, if possible.

Vertical line that contains $(5, -2)$

7. Find the equation of the line that contains the given points. Write the equation in slope-intercept form, if possible.

$(4, 10)$ and $(0, 2)$

8. Find the equation of the line that contains the given points. Write the equation in slope-intercept form, if possible.

$(-2, 8)$ and $(-4, 13)$

9. Find the equation of the line that contains the given points. Write the equation in slope-intercept form, if possible.

$(-1, 3)$ and $(5, 3)$

10. Find the equation of the line that contains the given points. Write the equation in slope-intercept form, if possible.

$(-2, 5)$ and $(-2, 7)$