VL5B- Linear Equations in Point-Slope Form

Point-slope form is the equation of a non-vertical line _____ that passes through a given point (x_1, y_1) with a slope m.

Ex 1) (3,2) is on the line and the slope is 2

Ex 2) (-4, 1) is on the line and the slope is ½

Ex 3) (3, -6) is on the line and the m = -5

You can change a point-slope equation into slope-intercept form by solving for ____.

Ex 4) $y + 3 = \frac{5}{6}(x + 2)$

Ex 5) $y - 2 = 5(x - 4)$

You can determine the slope and a point on the line from an equation in point-slope form.

Ex 6) $y + 8 = 3(x + 2)$

Ex 7) $y + 4 = \frac{2}{3}(x - 6)$

Ex 8) $y - 2 = -5(x + 9)$

Describe how an equation in point-slope form can be used to graph a line.