Name_____ Date: _____ Period: ____

Point-Slope Form (Practice Worksheet)

Write an equation in point-slope form of the line that passes through the given point and has the given slope.

❶ (2, 7); m = -4

❷ (12, 5); m = -3

❸ (4, -5); m = 6

❹ (-6, -2); m = 3

❺ (7, -6); m = $\frac{1}{2}$

❻ (-8, 2); m = $-\frac{3}{4}$

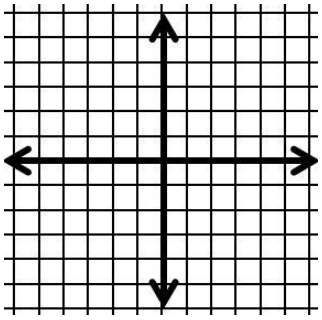
Graph the equations below.

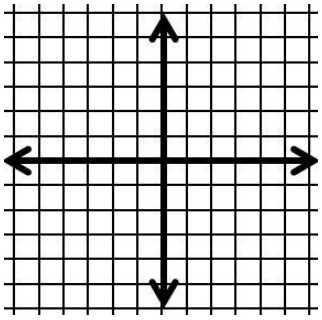
❼ y + 4 = -3(x + 2)

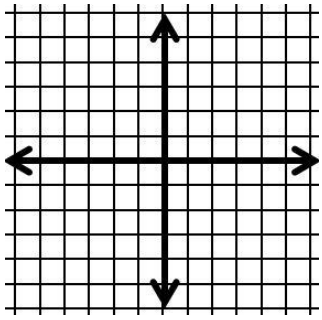
❽ y + 3 = -2(x – 2)

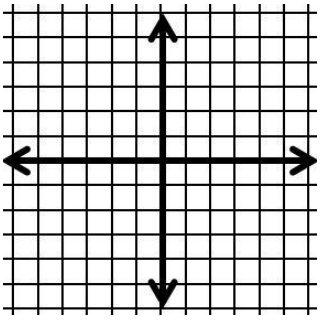
❾ y – 1 = 3(x + 6)

❿ y + 4 = $\frac{-5}{2}$(x – 3)



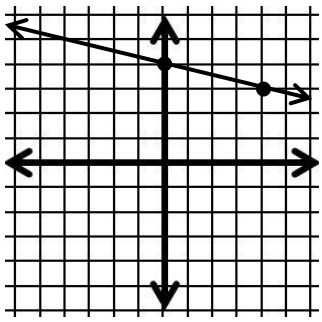






Write an equation in point-slope form of the line graphed below. (Use the right hand point)

⓫



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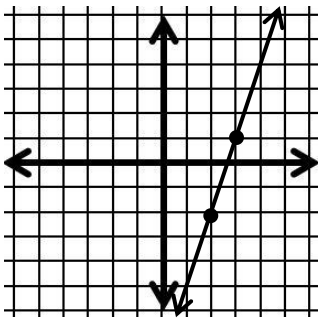

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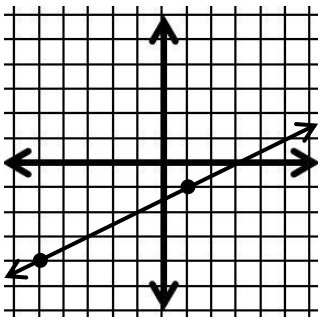


Write an equation in point-slope form of the line that passes through the two points given. Use the first point to write the equation.

⓮ (4,7) and (5, 1)

⓯ (9, -2) and (-3, 2)

⓰ (3, -8) and 7(-2)

Name_____ Date: _____ Period: ____

Point-Slope Form (Practice Worksheet) Answer Key!

Write an equation in point-slope form of the line that passes through the given point and has the given slope.

❶ (2, 7); m = -4

$y - 7 = -4(x - 2)$

❷ (12, 5); m = -3

$y - 5 = -3(x - 10)$

❸ (4, -5); m = 6

$y + 5 = 6(x - 4)$

❹ (-6, -2); m = 3

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

❺ (7, -6); m = $\frac{1}{2}$

$y + 6 = \frac{1}{2}(x - 7)$

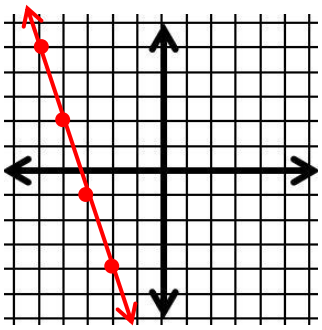
❻ (-8, 2); m = $-\frac{3}{4}$

$y - 2 = -\frac{3}{4}(x + 8)$

Graph the equations below.

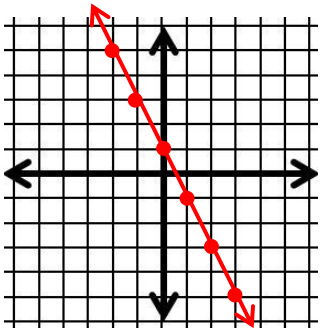
❼ y + 4 = -3(x + 2)

(-2, -4); m = -3



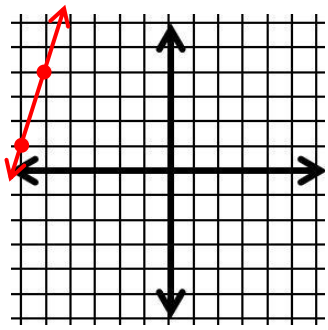
❽ y + 3 = -2(x – 2)

(2, -3); m = -2



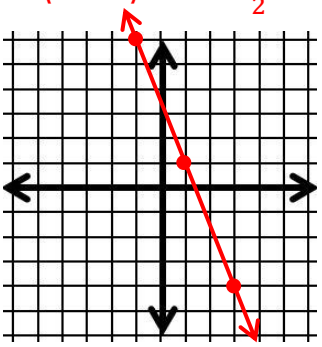
❾ y – 1 = 3(x + 6)

(-6, 1); m = 3



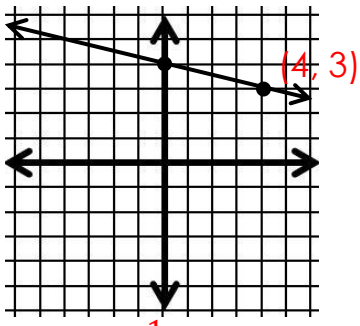
❿ y + 4 = $\frac{-5}{2}$(x – 3)

(3, -4); m = $\frac{-5}{2}$



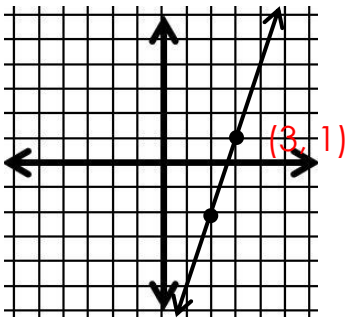
Write an equation in point-slope form of the line graphed below. (Use the right hand point)

⓫



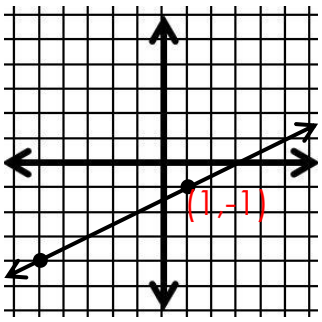
$y - 4 = -\frac{1}{4}(x - 3)$

⓬



$y - 1 = 3(x - 3)$

⓭



$y + 1 = 2(x - 1)$

Write an equation in point-slope form of the line that passes through the two points given. Use the first point to write the equation.

⓮ (4,7) and (5, 1)

$y - 1 = -6(x - 5)$

⓯ (9, -2) and (-3, 2)

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

⓰ (3, -8) and 7(-2)

$y + 8 = \frac{3}{2}(x + 4)$