

# 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.

Ⓐ (2, 7);  $m = -4$

Ⓑ (12, 5);  $m = -3$

Ⓒ (4, -5);  $m = 6$

Ⓓ (-6, -2);  $m = 3$

Ⓔ (7, -6);  $m = \frac{1}{2}$

Ⓕ (-8, 2);  $m = -\frac{3}{4}$

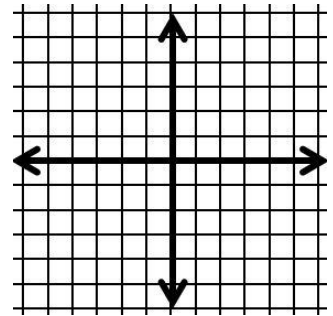
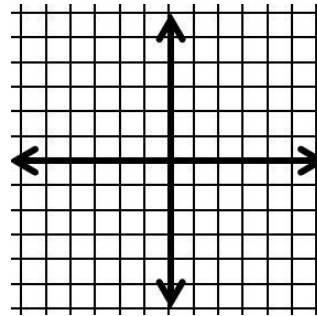
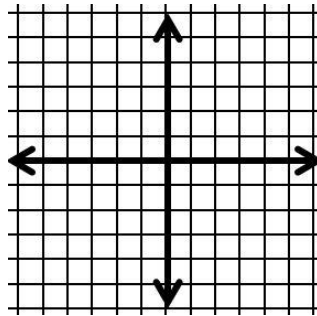
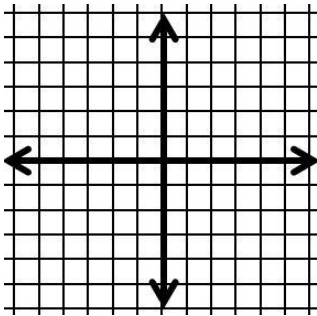
Graph the equations below.

Ⓖ  $y + 4 = -3(x + 2)$

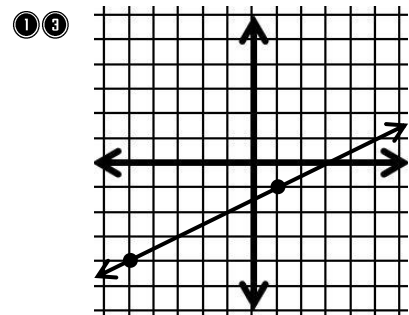
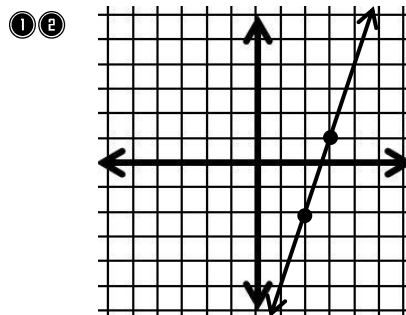
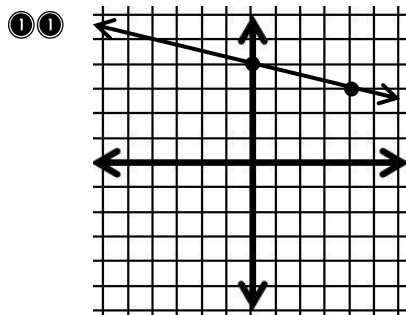
Ⓗ  $y + 3 = -2(x - 2)$

Ⓙ  $y - 1 = 3(x + 6)$

Ⓚ  $y + 4 = \frac{-5}{2}(x - 3)$



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



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.

Ⓞ (4, 7) and (5, 1)

Ⓟ (9, -2) and (-3, 2)

Ⓠ (3, -8) and 7(-2)

# 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.

① (2, 7);  $m = -4$   
 $y - 7 = -4(x - 2)$

② (12, 5);  $m = -3$   
 $y - 5 = -3(x - 10)$

③ (4, -5);  $m = 6$   
 $y + 5 = 6(x - 4)$

④ (-6, -2);  $m = 3$   
 $y + 2 = 3(x + 6)$

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

⑥ (-8, 2);  $m = -\frac{3}{4}$   
 $y - 2 = -\frac{3}{4}(x + 8)$

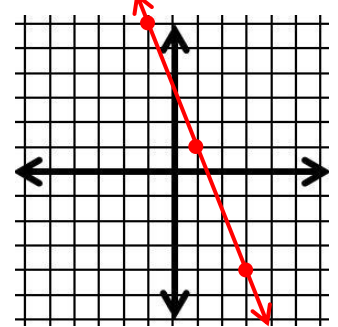
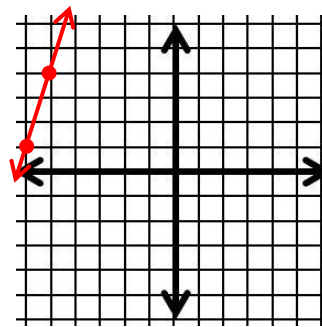
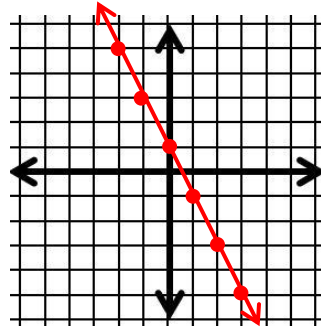
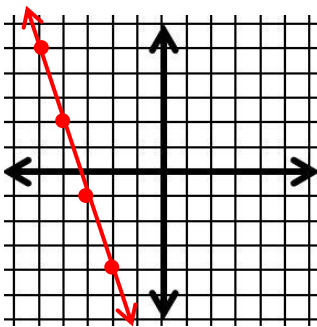
Graph the equations below.

⑦  $y + 4 = -3(x + 2)$   
 $(-2, -4); m = -3$

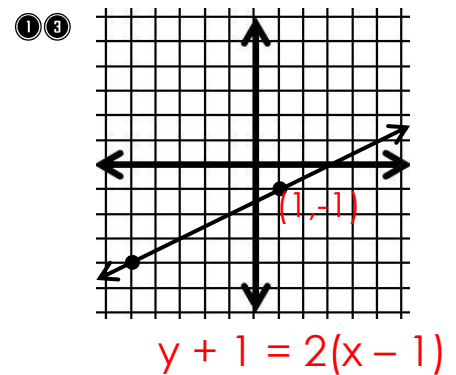
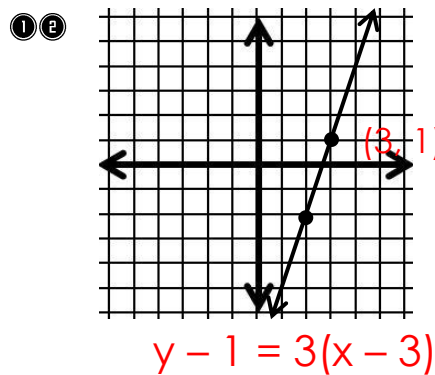
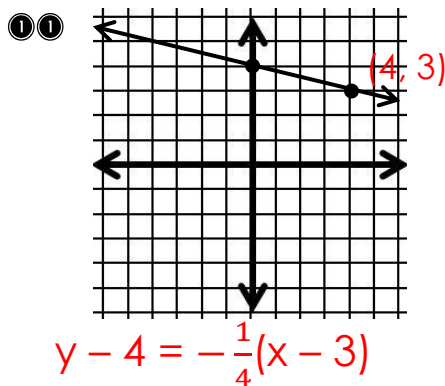
⑧  $y + 3 = -2(x - 2)$   
 $(2, -3); m = -2$

⑨  $y - 1 = 3(x + 6)$   
 $(-6, 1); m = 3$

⑩  $y + 4 = -\frac{5}{2}(x - 3)$   
 $(3, -4); m = -\frac{5}{2}$



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



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.

⑭ (4, 7) and (5, 1)  
 $y - 1 = -6(x - 5)$

⑮ (9, -2) and (-3, 2)  
 $y - 2 = -\frac{1}{3}(x + 3)$

⑯ (3, -8) and 7(-2)  
 $y + 8 = \frac{3}{2}(x + 4)$