## 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.

$$(2,7); m = -4$$

**3** 
$$(4, -5)$$
;  $m = 6$ 

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

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

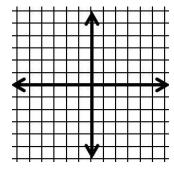
Graph the equations below.

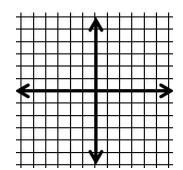
$$y + 4 = -3(x + 2)$$

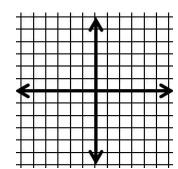
(a) 
$$y + 3 = -2(x - 2)$$

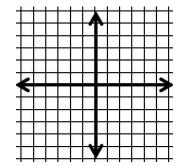
$$9 y - 1 = 3(x + 6)$$

① 
$$y + 3 = -2(x - 2)$$
 ①  $y - 1 = 3(x + 6)$  ① ①  $y + 4 = \frac{-5}{2}(x - 3)$ 

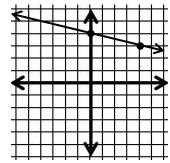


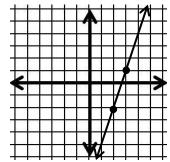


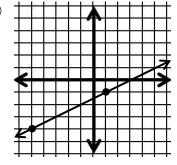




Write an equation in point-slope form of the line graphed below. (Use the right hand point)







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.

 $\bullet$  (4,7) and (5, 1)

**1** (9, -2) and (-3, 2)

 $\bigcirc$  (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.

(2, 7); 
$$m = -4$$
  
 $\sqrt{-7} = -4(x-2)$ 

① 
$$(4, -5)$$
; m = 6  
y + 5 = 6(x - 4)

① (-6, -2); 
$$m = 3$$
  
 $y + 2 = 3(x + 6)$ 

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

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

Graph the equations below.

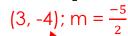
$$y + 4 = -3(x + 2)$$

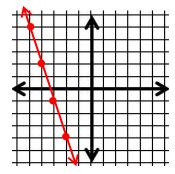
$$9 y - 1 = 3(x + 6)$$

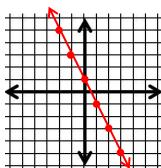
$$(-2, -4)$$
; m = -3

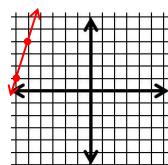
$$(2, -3)$$
;  $m = -2$ 

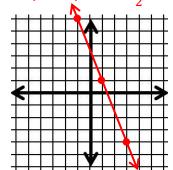
$$(-6, 1); m = 3$$





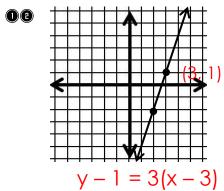


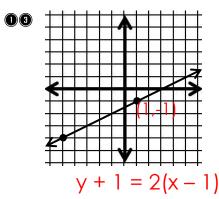




Write an equation in point-slope form of the line graphed below. (Use the right hand point)

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





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.

**1** (4,7) and (5, 1)

 $\bigcirc$  (9, -2) and (-3, 2)

 $\bigcirc$  (3, -8) and 7(-2)

y - 1 = -6(x - 5)

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

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