

## Linear Equations (B)

Point-Slope Form ( $y - y_1 = m(x - x_1)$ )

Write the equation of each line in point-slope form then solve for  $y$ .

1. Slope:  $\frac{7}{8}$     Point:  $(-8,-7)$

2. Slope:  $-1$     Point:  $(-6,7)$

3. Slope:  $\frac{1}{2}$     Point:  $(2,7)$

4. Slope:  $4$     Point:  $(1,2)$

5. Slope:  $-1$     Point:  $(-2,-2)$

6. Slope:  $-\frac{1}{2}$     Point:  $(8,-7)$

7. Slope:  $1$     Point:  $(3,-1)$

8. Slope:  $-\frac{7}{8}$     Point:  $(8,1)$

9. Slope:  $-4$     Point:  $(-2,2)$

10. Slope:  $0$     Point:  $(-2,-1)$

## Linear Equations (B) Answers

Point-Slope Form ( $y - y_1 = m(x - x_1)$ )

Write the equation of each line in point-slope form then solve for y.

1. Slope:  $\frac{7}{8}$  Point: (-8,-7)

$$y - (-7) = \frac{7}{8}(x - (-8))$$

$$y = \frac{7}{8}x$$

2. Slope:  $-1$  Point: (-6,7)

$$y - 7 = -1(x - (-6))$$

$$y = -x + 1$$

3. Slope:  $\frac{1}{2}$  Point: (2,7)

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

$$y = \frac{1}{2}x + 6$$

4. Slope: 4 Point: (1,2)

$$y - 2 = 4(x - 1)$$

$$y = 4x - 2$$

5. Slope:  $-1$  Point: (-2,-2)

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

$$y = -x - 4$$

6. Slope:  $-\frac{1}{2}$  Point: (8,-7)

$$y - (-7) = -\frac{1}{2}(x - 8)$$

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

7. Slope: 1 Point: (3,-1)

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

$$y = x - 4$$

8. Slope:  $-\frac{7}{8}$  Point: (8,1)

$$y - 1 = -\frac{7}{8}(x - 8)$$

$$y = -\frac{7}{8}x + 8$$

9. Slope:  $-4$  Point: (-2,2)

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

$$y = -4x - 6$$

10. Slope: 0 Point: (-2,-1)

$$y - (-1) = 0(x - (-2))$$

$$y = -1$$