

Linear Equations (E)

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: $-\frac{9}{7}$ Point: (-7,4)

2. Slope: $\frac{1}{8}$ Point: (8,0)

3. Slope: $-\frac{1}{4}$ Point: (-4,2)

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

5. Slope: $\frac{7}{4}$ Point: (4,6)

6. Slope: $-\frac{1}{3}$ Point: (-6,9)

7. Slope: -3 Point: (-2,-3)

8. Slope: $\frac{7}{4}$ Point: (4,8)

9. Slope: $-\frac{5}{9}$ Point: (-9,4)

10. Slope: $-\frac{1}{3}$ Point: (3,-6)

Linear Equations (E) 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: $-\frac{9}{7}$ Point: (-7,4)

$$y - 4 = -\frac{9}{7}(x - (-7))$$

$$y = -\frac{9}{7}x - 5$$

2. Slope: $\frac{1}{8}$ Point: (8,0)

$$y - 0 = \frac{1}{8}(x - 8)$$

$$y = \frac{1}{8}x - 1$$

3. Slope: $-\frac{1}{4}$ Point: (-4,2)

$$y - 2 = -\frac{1}{4}(x - (-4))$$

$$y = -\frac{1}{4}x + 1$$

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

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

$$y = \frac{1}{8}x - 3$$

5. Slope: $\frac{7}{4}$ Point: (4,6)

$$y - 6 = \frac{7}{4}(x - 4)$$

$$y = \frac{7}{4}x - 1$$

6. Slope: $-\frac{1}{3}$ Point: (-6,9)

$$y - 9 = -\frac{1}{3}(x - (-6))$$

$$y = -\frac{1}{3}x + 7$$

7. Slope: -3 Point: (-2,-3)

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

$$y = -3x - 9$$

8. Slope: $\frac{7}{4}$ Point: (4,8)

$$y - 8 = \frac{7}{4}(x - 4)$$

$$y = \frac{7}{4}x + 1$$

9. Slope: $-\frac{5}{9}$ Point: (-9,4)

$$y - 4 = -\frac{5}{9}(x - (-9))$$

$$y = -\frac{5}{9}x - 1$$

10. Slope: $-\frac{1}{3}$ Point: (3,-6)

$$y - (-6) = -\frac{1}{3}(x - 3)$$

$$y = -\frac{1}{3}x - 5$$