Linear Equations (A)

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: -4 Point: (-1,-3)

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

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

4. Slope: $-\frac{11}{4}$ Point: (4,-4)

5. Slope: undefined Point: (-4,-8)

6. Slope: $\frac{10}{9}$ Point: (-9,-9)

7. Slope: $\frac{4}{7}$ Point: (7,-3)

8. Slope: $\frac{3}{4}$ Point: (-4,6)

9. Slope: $-\frac{4}{3}$ Point: (-9,5)

10. Slope: $-\frac{13}{4}$ Point: (4,-8)

Linear Equations (A) 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: -4 Point: (-1,-3)

   $y - (-3) = -4(x - (-1))$

   $y = -4x - 7$

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

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

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

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

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

   $y = 3x - 4$

4. Slope: $-\frac{11}{4}$ Point: (4,-4)

   $y - (-4) = -\frac{11}{4}(x - 4)$

   $y = -\frac{11}{4}x + 7$

5. Slope: undefined Point: (-4,-8)

   $x = -4$

6. Slope: $\frac{10}{9}$ Point: (-9,-9)

   $y - (-9) = \frac{10}{9}(x - (-9))$

   $y = \frac{10}{9}x + 1$

7. Slope: $\frac{4}{7}$ Point: (7,-3)

   $y - (-3) = \frac{4}{7}(x - 7)$

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

8. Slope: $\frac{3}{4}$ Point: (-4,6)

   $y - 6 = \frac{3}{4}(x - (-4))$

   $y = \frac{3}{4}x + 9$

9. Slope: $-\frac{4}{3}$ Point: (-9,5)

   $y - 5 = -\frac{4}{3}(x - (-9))$

   $y = -\frac{4}{3}x - 7$

10. Slope: $-\frac{13}{4}$ Point: (4,-8)

    $y - (-8) = -\frac{13}{4}(x - 4)$

    $y = -\frac{13}{4}x + 5$