Algebra 1 ECA Remediation Name Answer Key

Homework 11.1

Write the slope-intercept form of the equation of the line through the given point with the given slope.

1) through: $(1, -2)$, slope $= -4$

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

$y + 2 = -4x + 4$

$-2 \quad -2$

$y = -4x + 2$

2) through: $(3, -1)$, slope $= -2$

$y + 1 = -2(x - 3)$

$y + 1 = -2x + 6$

$-1 \quad -1$

$y = -2x + 5$

3) through: $(1, 4)$, slope $= 8$

$y - 4 = 8(x - 1)$

$y - 4 = 8x - 8$

$+4 \quad +4$

$y = 8x - 4$

Write the slope-intercept form of the equation of the line through the given points.

4) through: $(5, -1)$ and $(4, 0)$

$m = \frac{-1 - 0}{5 - 4} = \frac{-1}{1} = -1$

$y + 1 = -1(x - 5)$

$y + 1 = -x + 5$

$-1 \quad -1$

$y = -x + 4$

5) through: $(1, 0)$ and $(4, -3)$

$m = \frac{0 + 3}{1 - 4} = \frac{3}{-3} = -1$

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

$y = -x + 1$

6) through: $(-3, -2)$ and $(-5, 2)$

$m = \frac{-2 - 2}{-3 + 5} = \frac{-4}{2} = \frac{-2}{1}$

$y - 2 = -2(x + 5)$

$y - 2 = -2x - 10$

$+2 \quad +2$

$y = -2x - 8$

Solve each equation.

7) $-6.5(x + 7.9) = -87.1$

$-6.5x - 51.35 = -87.1$

$+51.35 \quad +51.35$

$\frac{-6.5x}{-6.5} = \frac{-35.75}{-6.5}$

$x = 5.5$

8) $5.8(1 + 3.8r) - 2r = 140.068$

$5.8 + 22.04r - 2r = 140.068$

$5.8 + 20.04r = 140.068$

$-5.8 \quad -5.8$

$\frac{20.04r}{20.04} = \frac{134.268}{20.04}$

$r = 6.7$

Answers to Homework 11.1

1) $y = -4x + 2$
2) $y = -2x + 5$
3) $y = 8x - 4$
4) $y = -x + 4$
5) $y = -x + 1$
6) $y = -2x - 8$
7) $\{5.5\}$
8) $\{6.7\}$