Algebra 1 ECA Remediation Name Answer Key

Homework 11.3

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

1) through: (3, 1), slope = 1

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

2) through: (3, 4), slope = 8

$y-4=8(x-3)$
$y-4=8x-24$
$+4 \quad +4$
$y=8x-20$

3) through: (3, –2), slope = –2

$y+{}^{+}2=-2(x-3)$
$y+2=-2x+6$
$-2 \quad -2$
$y=-2x+4$

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

4) through: (4, –2) and (5, –3)

$m=\frac{-2+{}^{+}3}{4-5}=\frac{1}{-1}=-1$ $\quad y=-x+2$

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

5) through: (–4, –5) and (–5, –2)

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

$y+{}^{+}2=-3(x+{}^{+}5)$
$y+2=-3x-15$
$-2 \quad -2$
$y=-3x-17$

6) through: (–3, –4) and (–5, 0)

$m=\frac{-4-0}{-3+{}^{+}5}=\frac{-4}{2}=-2$ $\quad y=-2x-10$

$y+4=-2(x+3)$
$y+4=-2x-6$
$-4 \quad -4$

Solve each equation.

7) $-6.5(p+5.6)-7.8p=-90.74$

$-6.5p-36.4-7.8p=-90.74$
$-14.3p-36.4=-90.74$
$+36.4 \quad +36.4$
$\frac{-14.3p}{-14.3}=\frac{-54.34}{-14.3}$
$p=3.8$

8) $-5.1(6k+7.7)+6.2k=119.33$

$-30.6k-39.27+6.2k=119.33$
$-24.4k-39.27=119.33$
$+39.27 \quad +39.27$
$\frac{-24.4k}{-24.4}=\frac{158.6}{-24.4}$
$k=-6.5$

Answers to Homework 11.3

1) $y = x - 2$
2) $y = 8x - 20$
3) $y = -2x + 4$
4) $y = -x + 2$
5) $y = -3x - 17$
6) $y = -2x - 10$
7) $\{3.8\}$
8) $\{-6.5\}$