Section 3-1/3-2

1) $-11 = x - (-15)$

$$-11 = x + 15$$
$$-15 \qquad -15$$
$$-26 = x$$

Section 3-1/3-2

1. $\dfrac{y}{4} = \dfrac{15}{6} \cdot 4$

$y = \dfrac{60}{6}$

$y = 10$

2) $\dfrac{y}{4} = \dfrac{15}{6}$

$6y = 60$

$y = 10$

Section 3-3

3) $-2(4-x)-7=5$

$$-8+2x-7=5$$

$$2x-15=5$$
$$+15\quad +15$$
$$2x=20$$
$$x=10$$

Section 3-3

4) $-\frac{2}{3}(6 - 2a) = 6$

$$-\frac{3}{2} \cdot -\frac{2}{3}(6 - 2a) = \frac{6}{1} \cdot -\frac{3}{2}$$

$$6 - 2a = -9$$
$$-6 \qquad\qquad -6$$

$$\frac{-2a}{-2} = \frac{-15}{-2}$$

$$a = \frac{15}{2} \text{ or } 7\frac{1}{2}$$

Section 3-3

5) $n - 4(1 + 5n) = -2$

$$n - 4 - 20n = -2$$

$$-19n - 4 = -2$$
$$ +4 \quad +4$$
$$\frac{-19n}{-19} = \frac{2}{-19}$$

$$n = -\frac{2}{19}$$

Section 3-4

6) $9(-5 - r) = -10 - 2r$

$$-45 - 9r = -10 - 2r$$
$$+9r +9r$$
$$-45 = -10 + 7r$$
$$+10 +10$$
$$-35 = 7r$$
$$-5 = r$$

Section 3-4

7) $\frac{1}{3}(3x - 9) = 4(x + 6)$

$$x - 3 = 4x + 24$$
$$-x \qquad\qquad -x$$
$$-3 = 3x + 24$$
$$-24 \qquad\qquad -24$$
$$\frac{-27}{3} = \frac{3x}{3}$$
$$-9 = x$$

Section 3-4

8) $(6m - 3) = 10 - 6(2 - m)$

$$6m - 3 = 10 - 12 + 6m$$

$$6m - 3 = 6m + ^-2$$

no solution

Section 3-7

Solve for r.

9) $\dfrac{S}{\pi s} = \dfrac{\pi s}{\pi s} (R + r)$

$$\dfrac{S}{\pi s} = R + r$$

$$-R \qquad -R$$

$$\dfrac{S}{\pi s} - R = r$$

Section 3-7

10) Rewrite the equation $3x + 2y - 4 = 2(5 - y)$
so that y is a function of x. Then find y when $x = -2, 0,$ and 1.

$$3x + 2y - 4 = 10 - 2y$$
$$ + 2y + 2y$$

$$3x + 4y - 4 = 10$$
$$ +4 \quad +4$$

$$3x + 4y = 14$$
$$-3x -3x$$

$$\frac{4y}{4} = \frac{-3x}{4} + \frac{14}{4}$$

$$y = -\frac{3}{4}x + \frac{7}{2}$$

X	Y
-2	5
0	$\frac{7}{2}$
1	$\frac{11}{4}$