

5.2 w.p.

Pg. 245-246 # 16, 19, 24, 25, 26 Pg. 252 # 40, 41, 42

16.)  $11x - 7y = -14$

$x - 2y = -4$

$-x + 2y = +2y$   $x = y + (-0, 2)$

$x = 2y - 4$

$11(2y - 4) - 7y = -14$

$22y - 44 - 7y = -14$

$15y - 44 = -14$   
 $+44 +44$

$15y = 30$

$15 \quad 15$

$y = 2$

$x - 2(2) = -4$

$x - 4 = -4$

$+4 +4$

$x = 0$

26.)  $A + B = 200$   $B = -A + 200$

$9.50A + 27B = 4,000$

$9.50A + 27(-A + 200) = 4,000$

$9.50A - 27A + 5400 = 4,000$

$-17.5A + 5400 = 4,000$

$-5400 -5400$

$-17.5A = -1,400$

$A = 80$

80 Shares of Stock A  
120 Shares of Stock B

19.)  $x + y = 180$

$x = 3y$

$x = \text{corn}$

$y = \text{wheat}$

$3y + y = 180$

$4y = 180$

$4 \quad 4$

$y = 45$

135 corn

45 wheat

$x = 3(45)$

$x = 135$

24.)  $x + y = -10$

$2x - y = 55$

(15, -25)

25.)  $x = 5 \text{ points}$   $y = 2 \text{ points}$

$x + y = 38$

$y = -x + 38$

$5x + 2y = 100$

$5x + 2(-x + 38) = 100$

$5x - 2x + 76 = 100$

$3x + 76 = 100$

$-76 -76$

$3x = 24$

$x = 8$

8 5 points  
30 2 point

$$40.) (4,1) \quad y = -2x + 7$$

$$y - y_1 = m(x - x_1)$$

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

$$y - 1 = -2x + 8$$

$$+1$$

$$+1$$

$$\boxed{y = -2x + 9}$$

$$41.) (0,6) \quad y = 5x - 3$$

$$y - y_1 = m(x - x_1)$$

$$y - 6 = 5(x - 0)$$

$$y - 6 = 5x$$

$$+6$$

$$+6$$

$$\boxed{y = 5x + 6}$$

$$42.) (-5,-2) \quad y = 2/3x + 1$$

$$y - y_1 = m(x - x_1)$$

$$y + 2 = 2/3(x + 5)$$

$$y + 2 = 2/3x + 10/3$$

$$-2$$

$$-2$$

$$\boxed{y = 2/3x + 4/3}$$

$$\frac{10}{3} - \frac{2}{1}$$

$$\frac{10}{3} - \frac{6}{3} = \frac{4}{3}$$