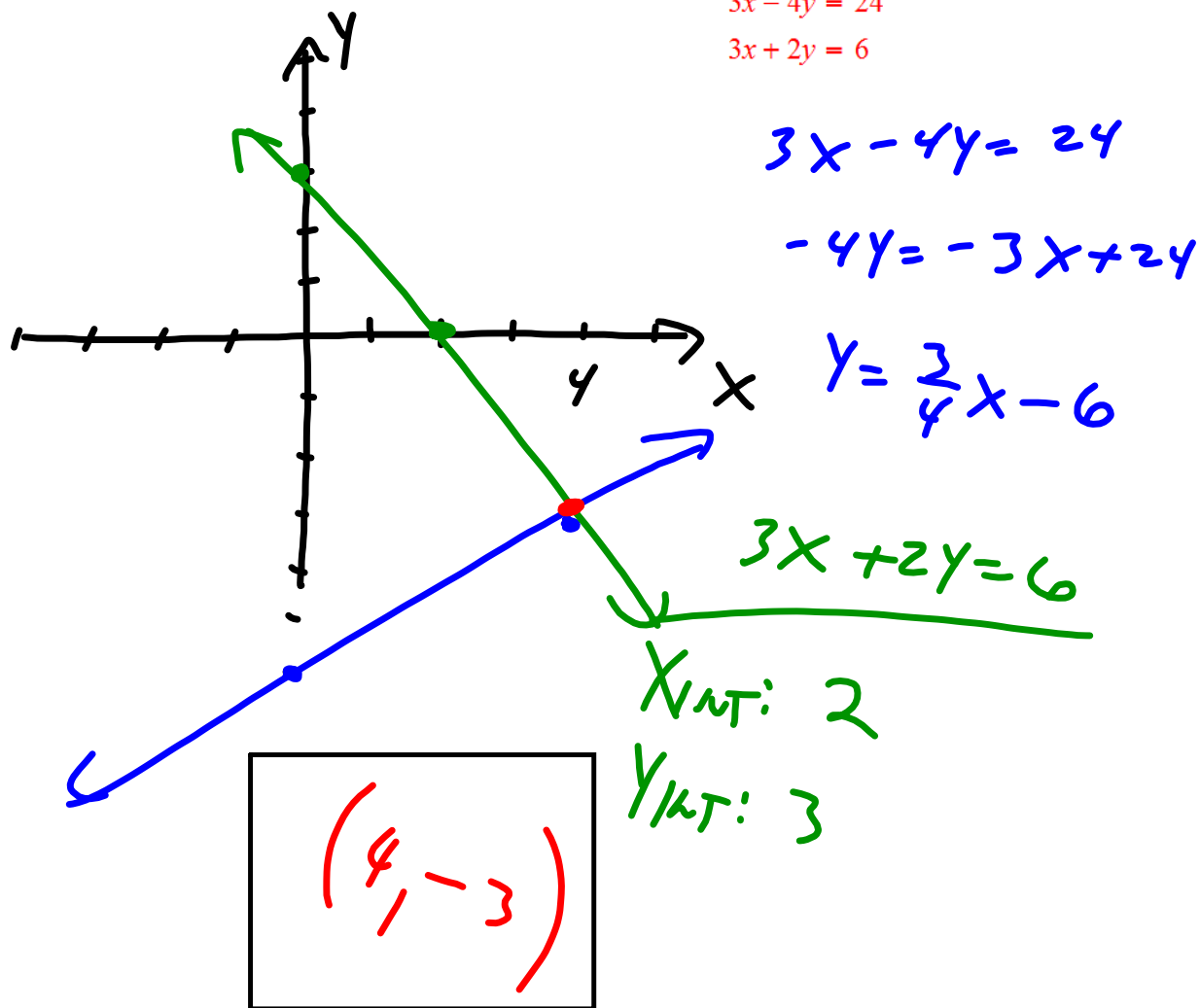1) **Section 3.1** (6 points)  Solve the following system of equations by using the **Graphing Method**.

$3x - 4y = 24$

$3x + 2y = 6$

$3x - 4y = 24$

$-4y = -3x + 24$

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

$3x + 2y = 6$

$X_{INT}: 2$

$Y_{INT}: 3$

$\left( 4, -3 \right)$

2) **Section 3.2** (6 points) Solve the following system of equations by using the **Method of Substitution**.

$$6x - 8y = 6$$
$$-3x + 2y = -2$$

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

$$2y = 3x - 2$$

$$y = \frac{3}{2}x - 1$$

$$6x - 8y = 6$$

$$6x - 8\left(\frac{3}{2}x - 1\right) = 6$$

$$6x - 12x + 8 = 6$$

$$-6x = -2$$

$$x = \frac{1}{3}$$

$$\left(\frac{1}{3}, -\frac{1}{2}\right)$$

$$y = \frac{3}{2}\left(\frac{1}{3}\right) - 1$$

$$y = \frac{1}{2} - 1 = -\frac{1}{2}$$

llowing system of equations by using the **Method of Eliminat**

$$3x - 2y = 22$$

$$-5x + 6y = -36$$

$$9x - 6y = 66$$
$$-5x + 6y = -36$$
_____
$$4x \qquad = 30$$

$$x = \frac{30}{4}$$

$$x = \frac{15}{2}$$

$$15x - 10y = 110$$
$$-15x + 18y = -108$$
_____
$$8y = 2$$

$$y = \frac{2}{8}$$

$$y = \frac{1}{4}$$

$$\left( \frac{15}{2}, \frac{1}{4} \right)$$