

Let $x = 4$, then

$$5x + 2y = 10$$

$$5(4) + 2y = 10$$

$$20 + 2y = 10$$

$$20 - 20 + 2y = 10 - 20$$

$$2y = -10$$

$$\frac{2y}{2} = \frac{-10}{2}$$

$$y = -5$$

$$(4, -5)$$

Let $x = -2$, then

$$5x + 2y = 10$$

$$5(-2) + 2y = 10$$

$$-10 + 2y = 10$$

$$-10 + 10 + 2y = 10 + 10$$

$$2y = 20$$

$$\frac{2y}{2} = \frac{20}{2}$$

$$y = 10$$

$$(-2, 10)$$