

April 30 worksheet

$$1. \begin{aligned} y &= -2x + 1 \\ y &= x - 8 \end{aligned}$$

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

$$x + 2x = 1 + 8$$

$$\begin{aligned} \cancel{3}x &= 9 \\ \cancel{3} & \quad \cancel{3} \\ x &= 3 \end{aligned}$$

$$\begin{aligned} y &= x - 8 \\ y &= 3 - 8 \\ y &= -5 \end{aligned}$$

$$\begin{aligned} &\underline{\text{Solution}} \\ &(3, -5) \end{aligned}$$

$$2. \begin{aligned} x + 7y &= 20 \\ x - y &= 4 \Rightarrow x = 4 + y \end{aligned}$$

$$4 + y + 7y = 20$$

$$y + 7y = 20 - 4$$

$$\frac{8y}{8} = \frac{16}{8}$$

$$y = 2$$

$$x = 4 + y$$

$$x = 4 + 2$$

$$x = 6$$

Solution (6, 2)

Answers:

$$3. (1, 0)$$

$$5. (0.5, 0.5)$$

$$7. (3, -2)$$

$$4. (1, 1)$$

$$6. (-2, 1)$$

$$8. \left(\frac{13}{8}, -\frac{7}{16}\right)$$