

$$\begin{aligned} y &= 3x - 7 \\ 2x + 4y &= 42 \end{aligned}$$

$$2x + 4(3x - 7) = 42$$

$$2x + 12x - 28 = 42$$

$$14x - 28 = 42$$

$$+28 \quad +28$$

$$\hline 14x = 70$$

$$\frac{14x}{14} = \frac{70}{14}$$

$$x = 5$$

$$\rightarrow y = 3(5) - 7$$

$$y = 15 - 7$$

$$y = 8$$

Answer: $x = 5$ and $y = 8$
 $(5, 8)$