



$$2x + y = 5$$

$$y = mx + b$$

↑ slope
↑ y-intercept

$$y = -2x + 5$$

$$\text{slope} = -\frac{2}{1}$$

$$4x - 2y = 6$$

$$-2y = -4x + 6$$

$$\frac{-2y}{-2} = \frac{-4x}{-2} + \frac{6}{-2}$$

$$y = 2x - 3$$

## Substitution

$$\begin{aligned} \text{1a) } 7x - y &= -10 \Rightarrow -y = -7x - 10 \\ -7x + 5y &= -6 \quad y = 7x + 10 \end{aligned}$$

$$-7x + 5(7x + 10) = -6$$

$$-7x + 35x + 50 = -6$$

$$-7x + 35x = -6 - 50$$

$$\frac{\cancel{28}x}{\cancel{28}} = \frac{-56}{\cancel{28}}$$

$$x = -2$$

$$\begin{aligned} y &= 7(-2) + 10 \\ y &= -14 + 10 \\ y &= -4 \end{aligned}$$