

Answers to examples in the PowerPoint presentation.

1.

$$\begin{aligned} \| m &= -\frac{3}{2} \\ -5 &= -\frac{3}{2}(2) + b \\ -5 &= -3 + b \\ +3 \quad +3 \\ -2 &= b \\ \\ y &= -\frac{3}{2}x - 2 \end{aligned}$$

2.

$$\begin{aligned} \| m &= -3 \\ 3 &= -3(7) + b \\ 3 &= -21 + b \\ +21 \quad +21 \\ 24 &= b \\ \\ y &= -3x + 24 \end{aligned}$$

3.

$$\begin{aligned} -5x + 4y &= -3 \\ +5x \quad \quad +5x \\ 4y &= 5x - 3 \\ \frac{4y}{4} &= \frac{5x}{4} - \frac{3}{4} \\ y &= \frac{5}{4}x - \frac{3}{4} \\ \| m &= \frac{5}{4} \\ -7 &= \frac{5}{4}(-16) + b \\ -7 &= -20 + b \\ +20 \quad +20 \\ 13 &= b \\ \\ y &= \frac{5}{4}x + 13 \end{aligned}$$

4.

$$\begin{aligned} \| m &= 4 \\ 3 &= 4(2) + b \\ 3 &= 8 + b \\ -8 \quad -8 \\ -5 &= b \\ \\ y &= 4x - 5 \end{aligned}$$

5.

$$\begin{aligned} \| m &= \frac{4}{3} \\ 3 &= \frac{4}{3}(12) + b \\ 3 &= 16 + b \\ -16 \quad -16 \\ -13 &= b \\ \\ y &= \frac{4}{3}x - 13 \end{aligned}$$

6.

$$\begin{aligned} \| m &= \frac{2}{3} \\ 1 &= \frac{2}{3}(-3) + b \\ 1 &= -2 + b \\ +2 \quad +2 \\ 3 &= b \\ \\ y &= \frac{2}{3}x + 3 \end{aligned}$$

7.

$$\begin{aligned} -3x + y &= 8 \\ +3x \quad \quad +3x \\ y &= 3x + 8 \\ \| m &= 3 \\ 10 &= 3(4) + b \\ 10 &= 12 + b \\ -12 \quad -12 \\ -2 &= b \\ \\ y &= 3x - 2 \end{aligned}$$