

IF  $a=b$  and  $a=c$  then  $c=b$

$$7. \begin{cases} m = 5p + 8 \\ m = -10p + 3 \end{cases}$$

$$\begin{aligned} m &= -10\left(-\frac{1}{3}\right) + 3 \\ &= \frac{10}{3} + \frac{9}{3} \\ &= \frac{19}{3} \end{aligned}$$

$$\begin{aligned} m &= 5\left(-\frac{1}{3}\right) + 8 \\ &= \frac{-5}{3} + \frac{24}{3} \\ &= \frac{19}{3} \end{aligned}$$

$$\begin{aligned} 5p + 8 &= -10p + 3 \\ +10p & \quad +10p \end{aligned}$$

$$\begin{aligned} 15p + 8 &= 3 \\ -8 & \quad -8 \end{aligned}$$

$$15p = -5$$

$$\frac{15p}{15} = \frac{-5}{15}$$

$$p = \frac{-5}{15} = \left(-\frac{1}{3}\right)$$

Answer  
 $\left(\frac{19}{3}, -\frac{1}{3}\right)$

$$10. \begin{cases} a = \frac{2}{5}b - 3 \\ a = 2b - 18 \end{cases}$$

$$\begin{aligned} a &= 2(9.375) - 18 \\ a &= 18.75 - 18 \\ a &= .75 \end{aligned}$$

$$\begin{aligned} a &= \frac{2}{5}(9.375) - 3 \\ a &= 3.75 - 3 \\ a &= .75 \end{aligned}$$

Answer  $(.75, 9.375)$

$$\frac{2}{5}b - 3 = 2b - 18$$

$$5\left(\frac{2}{5}b - 3\right) = 5(2b - 18)$$

$$\begin{aligned} 2b - 15 &= 10b - 90 \\ -10b & \quad -10b \end{aligned}$$

$$\begin{aligned} -8b - 15 &= -90 \\ +15 & \quad +15 \end{aligned}$$

$$\begin{aligned} -8b &= -75 \\ -8 & \quad -8 \end{aligned}$$

$$b = \frac{75}{8} = 9.375$$