

$$17. \begin{array}{l} (3x + 3y = 6) \cdot 5 \\ (5x - 6y = 15) \cdot 3 \end{array}$$

$$\begin{array}{r} 15x + 15y = 30 \\ + -15x + 18y = 45 \\ \hline 33y = -15 \\ \underline{33} \\ y = -5/11 \end{array}$$

$$3x + 3\left(-\frac{5}{11}\right) = 6$$

$$(3x - \frac{15}{11} = 6) \cdot 11$$

$$\begin{array}{r} 33x - 15 = 66 \\ \quad \quad +15 \\ \hline 33x = 81 \\ \underline{33} \\ x = 27/11 \end{array}$$

$$\left(\frac{27}{11}, -\frac{5}{11}\right)$$

$$18. \begin{array}{l} (3x - 2y = 6) \cdot 3 \\ (5x + 3y = -9) \cdot 2 \end{array}$$

$$\begin{array}{r} 9x - 6y = 18 \\ + 10x + 6y = -18 \\ \hline 19x = 0 \end{array}$$

$$\begin{array}{r} 19x = 0 \\ \underline{19} \\ x = 0 \end{array}$$

$$\boxed{(0, -3)}$$

$$\begin{array}{r} 3 \cdot 0 - 2y = 6 \\ -2y = 6 \\ \underline{-2} \\ y = -3 \end{array}$$

$$19. \begin{array}{r} -2x \\ x - y = 2x - 2 \\ x + y = 2y - 2 \\ -2y \end{array}$$

$$\begin{array}{r} -x - y = -2 \\ + x - y = -2 \\ \hline -2y = -4 \\ -2 \\ y = 2 \end{array}$$

$$\begin{array}{r} x - 2 = -2 \\ +2 \\ x = 0 \end{array}$$

$$(0, 2)$$

$$20. \begin{array}{r} -4y \\ 6x = 4y + 5 \\ 6y = 9x - 5 \\ -9x \end{array}$$

$$\begin{array}{l} (6x - 4y = 5)(6) \\ (-9x + 6y = -5)(-4) \end{array}$$

$$\begin{array}{r} 36x - 24y = 30 \\ + -36x + 24y = +20 \\ \hline 0 = 10 \end{array}$$

$$0 = 10$$

No Solution

2!

$$2p - 5q = 14$$

$$(p + \frac{3}{2}q - 5) \cdot 2$$

$$2p - 5q = 14$$

$$+ \quad -2p + 3q = -10$$

$$\frac{-8q = 4}{-8}$$

$$q = -\frac{1}{2}$$

$(-0.5, 5.75)$

$$2p - 5\left(-\frac{1}{2}\right) = 14$$

$$2p + \frac{5}{2} = 14$$

$$2p + 2.5 = 14$$

$$\frac{2p = 11.5}{2}$$

$$p = 5.75$$

HW Assessment

18. $3x - 2y = 6$
 $5x + 3y + 9 = 0$