

Solve each system of equations. Give answer as an ordered pair.

1. $6c + 5d = 9$
 $4c - d = -7$

$$\begin{array}{r} 6c + 5d = 9 \\ + 20c - 5d = -35 \\ \hline 26c = -26 \end{array}$$

$$\begin{array}{l} c = -1 \\ d = 3 \end{array}$$

$$(-1, 3)$$

2. $9a + 8b = 4$

$3a + 5b = -8$

$$\begin{array}{r} 9a + 8b = 4 \\ -9a + 15b = -24 \\ \hline -7b = 28 \\ \frac{-7b}{-7} = \frac{28}{-7} \\ b = -4 \end{array}$$

$$\begin{array}{r} 9a + 8(-4) = 4 \\ 9a - 32 = 4 \\ +32 +32 \\ 9a = 36 \\ \frac{9a}{9} = \frac{36}{9} \quad a = 4 \end{array}$$

$$(4, -4)$$

3.

$$\begin{array}{l} 3 \cdot (7m + 2n = 47) \\ 2 \cdot (2m - 3n = -8) \end{array}$$

$$\begin{array}{r} 21m + 6n = 141 \\ + 4m - 6n = -16 \\ \hline 25m = 125 \end{array}$$

$m = 5 \quad 2n = 12$

$35 + 2n = 47$

$$(5, 6)$$

4.

$$\begin{array}{l} 3(4x - 3y = -11) \\ 2(6x - 5y = -17) \end{array}$$

$$\begin{array}{r} 12x - 9y = -33 \\ -12x - 10y = -34 \\ \hline 19y = 1 \\ \frac{19y}{19} = \frac{1}{19} \\ y = \frac{1}{19} \end{array}$$

$$\begin{array}{l} y = 1 \\ x = 2 \end{array}$$

$$(-2, 1)$$

$$\begin{array}{r} 4x - 3(1) = -11 \\ 4x - 3 = -11 \\ +3 +3 \\ 4x = -8 \\ \frac{4x}{4} = \frac{-8}{4} \\ x = -2 \end{array}$$