

Systems of Equations

Answer Key

Solve each system of equations.

$$\begin{aligned} 1) \quad & 2a + b - 20 = 0 \\ & 6a - 5b = 12 \end{aligned}$$

$$\underline{a = 7; b = 6}$$

$$\begin{aligned} 2) \quad & 5d + 8c = 4 \\ & d - 2c = 8 \end{aligned}$$

$$\underline{c = -2; d = 4}$$

$$\begin{aligned} 3) \quad & -21 = -7p - q \\ & -15 = -5p - q \end{aligned}$$

$$\underline{p = 3; q = 0}$$

$$\begin{aligned} 4) \quad & 4u + 5v - 35 = 0 \\ & 4u + v - 15 = 0 \end{aligned}$$

$$\underline{u = \frac{5}{2}; v = 5}$$

$$\begin{aligned} 5) \quad & 8r - 7s = 13 \\ & -2s = -4 - r \end{aligned}$$

$$\underline{r = 6; s = 5}$$

$$\begin{aligned} 6) \quad & -4n = -9m + 8 \\ & 5n = -8m - 10 \end{aligned}$$

$$\underline{m = 0; n = -2}$$

$$\begin{aligned} 7) \quad & -3u + 54 = 6t \\ & -2u + 60 = 7t \end{aligned}$$

$$\underline{u = 2; t = 8}$$

$$\begin{aligned} 8) \quad & 9x + 5y = 5 \\ & 5y = -5 + 6x \end{aligned}$$

$$\underline{x = \frac{2}{3}; y = -\frac{1}{5}}$$