

# Systems of Equations

Answer Key

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Solve each system of equations.

$$\begin{aligned} 1) \quad & -5r - 4s = -9 \\ & r + 2s = -3 \end{aligned}$$

$$\underline{r = 5; s = -4}$$

$$\begin{aligned} 2) \quad & 6x + 3y = 15 \\ & -2x + 2y = 4 \end{aligned}$$

$$\underline{x = 1; y = 3}$$

$$\begin{aligned} 3) \quad & 5m + 4n - 8 = 0 \\ & 2n - 5m - 1 = 0 \end{aligned}$$

$$\underline{m = \frac{2}{5}; n = \frac{3}{2}}$$

$$\begin{aligned} 4) \quad & 2t - u = 6 \\ & t + 5u + 8 = 0 \end{aligned}$$

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

$$\begin{aligned} 5) \quad & 4p + q = 18 \\ & -p - q = -12 \end{aligned}$$

$$\underline{p = 2; q = 10}$$

$$\begin{aligned} 6) \quad & 8a = -3b - 1 \\ & 4a - b = 7 \end{aligned}$$

$$\underline{a = 1; b = -3}$$

$$\begin{aligned} 7) \quad & 7c + 3d = 13 \\ & -7c + 6d = 5 \end{aligned}$$

$$\underline{c = 1; d = 2}$$

$$\begin{aligned} 8) \quad & q - 7r = 16 \\ & q - r = 10 \end{aligned}$$

$$\underline{q = 9; r = -1}$$