

PART A: Find the solution to each of the systems of equations below. Circle your answer.

1.
$$\begin{cases} x = 9 \\ x + 4y = 41 \end{cases}$$

2.
$$\begin{cases} x + y = 15 \\ 2x - 4y = 48 \end{cases}$$

3.
$$\begin{cases} -4x + 4y = 24 \\ 8x - 2y = -24 \end{cases}$$

PART B: If two lines intersect on a coordinate plane at the point (2, 5), which of the following systems of equations could represent the two lines?. Circle each system of equations that applies.

a.
$$\begin{cases} x = 2 \\ y = 5 \end{cases}$$

b.
$$\begin{cases} y = x + 3 \\ x = y - 6 \end{cases}$$

a.
$$\begin{cases} x=2 \\ y=5 \end{cases}$$
 b.
$$\begin{cases} y=x+3 \\ x=y-6 \end{cases}$$
 c.
$$\begin{cases} y=2x+1 \\ y=3x-1 \end{cases}$$
 d.
$$\begin{cases} x=y-3 \\ 2y=6x-2 \end{cases}$$
 e.
$$\begin{cases} y=x+3 \\ y=2x \end{cases}$$

$$d. \begin{cases} x = y - 3 \\ 2y = 6x - 4 \end{cases}$$

$$e. \begin{cases} y = x + 3 \\ y = 2x \end{cases}$$

PART C: Find the solution to the following system of equations:

$$\begin{cases} x = 7 \\ x + y = 15 \end{cases}$$

PART D: Find the solution to the following system of equations:

$$\begin{cases} 4x + y = 41 \\ x + y = 14 \end{cases}$$

PART E: Find the solution to the following system of equations:

$$\begin{cases} 2x + 6y = 30 \\ 3x + 4y = 25 \end{cases}$$