

$$\begin{array}{r} \textcircled{8} \quad -x + 5y = 13 \\ + \quad x - y = 15 \\ \hline \end{array}$$

$$4y = 28$$

$$y = 7$$

$$x - 7 = 15$$

$$x = 22$$

$$(22, 7)$$

$$\begin{array}{r} \textcircled{12} \quad 6x + 5y = 39 \\ - \quad 3x + 5y = 27 \\ \hline \end{array}$$

$$3x = 12$$

$$x = 4$$

$$3(4) + 5y = 27$$

$$12 + 5y = 27$$

$$5y = 15$$

$$y = 3$$

$$(4, 3)$$

$$\begin{array}{r} \textcircled{10} \quad 4x - 7y = 3 \\ - \quad x - 7y = -15 \\ \hline \end{array}$$

$$3x = 18$$

$$x = 6$$

$$6 - 7y = -15$$

$$-7y = -21$$

$$y = 3$$

$$(6, 3)$$

$$\begin{array}{r} \textcircled{16} \quad 2(3x + y = 5) \Rightarrow + \quad 6x + 2y = 10 \\ \quad 2x - 2y = -2 \\ \hline \end{array}$$

$$8x = 8$$

$$x = 1$$

$$6(1) + 2y = 10$$

$$6 + 2y = 10$$

$$2y = 4$$

$$y = 2$$

$$(1, 2)$$

$$\begin{array}{r} \textcircled{18} \quad 3x + 2y = 17 \\ \quad 3(2x + 5y = 26) \\ \hline \end{array}$$



$$\begin{array}{r} 6x + 4y = 34 \\ - \quad 6x + 15y = 78 \\ \hline \end{array}$$

$$-11y = -44$$

$$y = 4$$

$$3x + 2(4) = 17$$

$$3x + 8 = 17$$

$$3x = 9$$

$$x = 3$$

$$(3, 4)$$

$$\begin{aligned} \textcircled{20} \quad & \begin{cases} 3(5x - 9y = -43) \\ 5(3x + 8y = 68) \end{cases} \Rightarrow \begin{cases} 15x - 27y = -129 \\ 15x + 40y = 340 \end{cases} \\ & \begin{array}{r} 15x - 27y = -129 \\ -15x + 40y = 340 \\ \hline -67y = -469 \\ -67 \phantom{y} \\ \hline y = 7 \end{array} \\ & \begin{array}{r} 3x + 8(7) = 68 \\ 3x + 56 = 68 \\ -56 \quad -56 \\ \hline 3x = 12 \\ x = 4 \end{array} \quad (4, 7) \end{aligned}$$

$$\begin{aligned} \textcircled{22} \quad & \begin{cases} 3x + 4y = 24 \\ 6x + 8y = 24 \end{cases} \Rightarrow \begin{cases} 6x + 8y = 48 \\ -6x + 8y = 24 \end{cases} \\ & \begin{array}{r} 6x + 8y = 48 \\ -6x + 8y = 24 \\ \hline 0 = 24 \end{array} \\ & \text{no solution} \end{aligned}$$

$$\begin{aligned} \textcircled{24} \quad & \begin{cases} 2x - 5y = 17 \\ 6x - 15y = 51 \end{cases} \Rightarrow \begin{cases} 6x - 15y = 51 \\ 6x - 15y = 51 \end{cases} \\ & \begin{array}{r} 6x - 15y = 51 \\ 6x - 15y = 51 \\ \hline 0 = 0 \end{array} \\ & \text{infinitely many solutions} \end{aligned}$$

$$\begin{aligned} \textcircled{26} \quad & \begin{cases} 4x - 8y = 15 \\ -5x + 10y = -30 \end{cases} \Rightarrow \begin{cases} 20x - 40y = 75 \\ +20x + 40y = -120 \end{cases} \\ & \begin{array}{r} 20x - 40y = 75 \\ +20x + 40y = -120 \\ \hline 0 = -45 \end{array} \\ & \text{no solution} \end{aligned}$$