

## Column A

$$1. \quad y = 6x - 11$$

$$-2x - 3y = -7$$

$$-2x - 3(6x - 11) = -7$$

$$-2x - 18x + 33 = -7$$

$$-20x + 33 = -7$$

$$\quad \quad -33 \quad -33$$

$$\hline -20x = -40$$

$$\quad \quad -20 \quad -20$$

$$x = 2$$

$$(2, 1)$$

$$y = 6x - 11$$

$$y = 6(2) - 11$$

$$y = 12 - 11 \quad y = 1$$

$$2. \quad -7x - 2y = -13$$

$$x - 2y = 11$$

$$\quad \quad +2y \quad +2y$$

$$x = 2y + 11$$

$$-7(2y + 11) - 2y = -13$$

$$-14y - 77 - 2y = -13$$

$$-16y - 77 = -13$$

$$\quad \quad +77 \quad +77$$

$$\hline -16y = 64$$

$$\quad \quad -16 \quad -16$$

$$y = -4$$

$$(3, -4)$$

$$x - 2y = 11$$

$$x - 2(-4) = 11$$

$$x + 8 = 11$$

$$\quad \quad -8 \quad -8$$

$$x = 3$$

## Column B

$$1. \quad x = -3y + 5$$

$$5y - 4x = -3$$

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

$$5y + 12y - 20 = -3$$

$$17y - 20 = -3$$

$$\quad \quad +20 \quad +20$$

$$\hline 17y = 17$$

$$\quad \quad 17 \quad 17$$

$$y = 1$$

$$(2, 1)$$

$$x = -3y + 5$$

$$x = -3(1) + 5$$

$$x = -3 + 5$$

$$x = 2$$

$$(2, 1)$$

$$2. \quad -3y - 3x = 3$$

$$x = -5y - 17$$

$$-3y - 3(-5y - 17) = 3$$

$$-3y + 15y + 51 = 3$$

$$12y + 51 = 3$$

$$\quad \quad -51 \quad -51$$

$$\hline 12y = -48$$

$$\quad \quad 12 \quad 12$$

$$y = -4$$

$$x = -5y - 17$$

$$x = -5(-4) - 17$$

$$x = 20 - 17$$

$$x = 3$$

$$(3, -4)$$

$$(3, -4)$$

## Solution

### Column A

3.  $y = 5x - 7$   
 $-3x - 2y = -12$

$$-3x - 2(5x - 7) = -12$$

$$-3x - 10x + 14 = -12$$

$$\begin{array}{r} -13x + 14 = -12 \\ -14 \quad -14 \\ \hline \end{array}$$

$$\begin{array}{r} -13x = -26 \\ -13 \quad -13 \\ \hline \end{array}$$

$$x = 2$$

$$y = 5x - 7$$

$$y = 5(2) - 7$$

$$y = 10 - 7$$

$$y = 3$$

$(2, 3)$

### Column B

3.  $-2y + 6x = 6$   
 $-7y + 8x = -5$

$$\begin{array}{r} -2y + 6x = 6 \\ -6x \quad -6x \\ \hline \end{array}$$

$$\begin{array}{r} -2y = -6x + 6 \\ -2 \quad -2 \quad -2 \\ \hline \end{array}$$

$$y = 3x - 3$$

$$-7(3x - 3) + 8x = -5$$

$$-21x + 21 + 8x = -5$$

$$\begin{array}{r} -13x + 21 = -5 \\ -21 \quad -21 \\ \hline \end{array}$$

$$\begin{array}{r} -13x = -26 \\ -13 \quad -13 \\ \hline \end{array}$$

$$x = 2$$

$$\begin{array}{r} -2y + 6x = 6 \\ -2y + 6(2) = 6 \end{array}$$

$$\begin{array}{r} -2y + 12 = 6 \\ -12 \quad -12 \\ \hline \end{array}$$

$$\begin{array}{r} -2y = -6 \\ -2 \quad -2 \\ \hline \end{array}$$

$$y = 3$$

$(2, 3)$

$(2, 3)$