

W-AZ Algebra 2 Week 19

$$\textcircled{1} \quad x + y + z = -2$$

$$\textcircled{2} \quad 2x + 2y - 3z = 11$$

$$\textcircled{3} \quad 3x - y + z = 4$$

$$\textcircled{2} \quad 2x + 2y - 3z = 11$$

$$\textcircled{1} \quad -2(x + y + z = -2)$$

$$\begin{array}{r} \cancel{2x} + \cancel{2y} - 3z = 11 \\ -\cancel{2x} - \cancel{2y} - 2z = 4 \\ \hline \end{array}$$

$$\frac{-5z = 15}{-5 \quad -5}$$

$$z = -3$$

$$3x - y + z = 4$$

$$3x - (-1) + (-3) = 4$$

$$3x + 1 - 3 = 4$$

$$3x - 2 = 4$$

$$+2 \quad +2$$

$$\frac{3x = 6}{\frac{3}{3} \quad \frac{3}{3}}$$

$$x = 2$$

$$\textcircled{3} \quad 3x - y + z = 4$$

$$\textcircled{1} \quad -3(x + y + z = -2)$$

$$\begin{array}{r} \cancel{3x} - y + z = 4 \\ -\cancel{3x} - 3y - 3z = +6 \\ \hline \end{array}$$

$$\boxed{-4y - 2z = 10}$$

$$z = -3$$

$$-4y - 2(-3) = 10$$

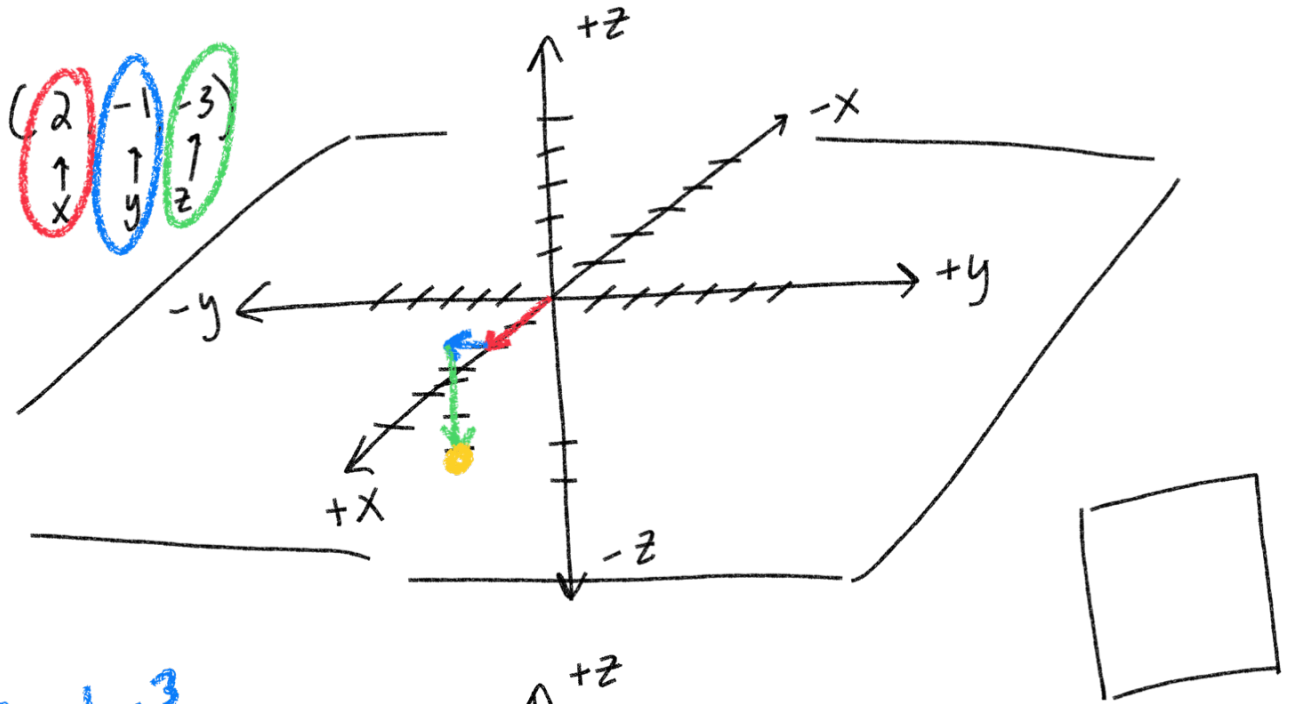
$$-4y + 6 = 10$$

$$\frac{-4y = 4}{-4 \quad -4}$$

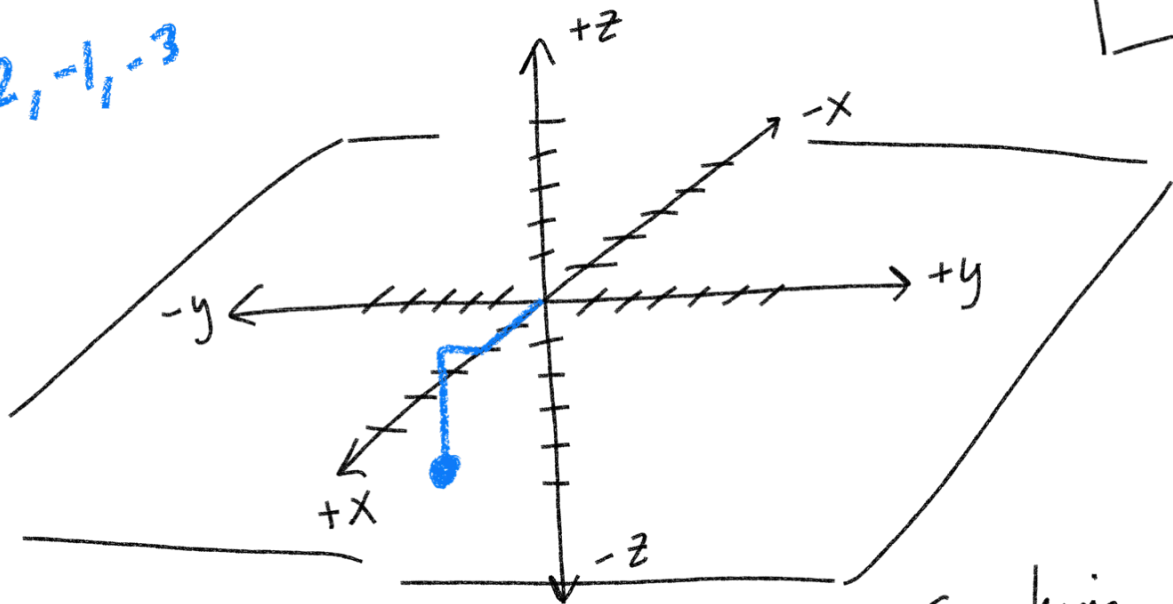
$$y = -1$$

$$\boxed{2, -1, -3}$$

$\uparrow \quad \uparrow \quad \uparrow$
 $x \quad y \quad z$



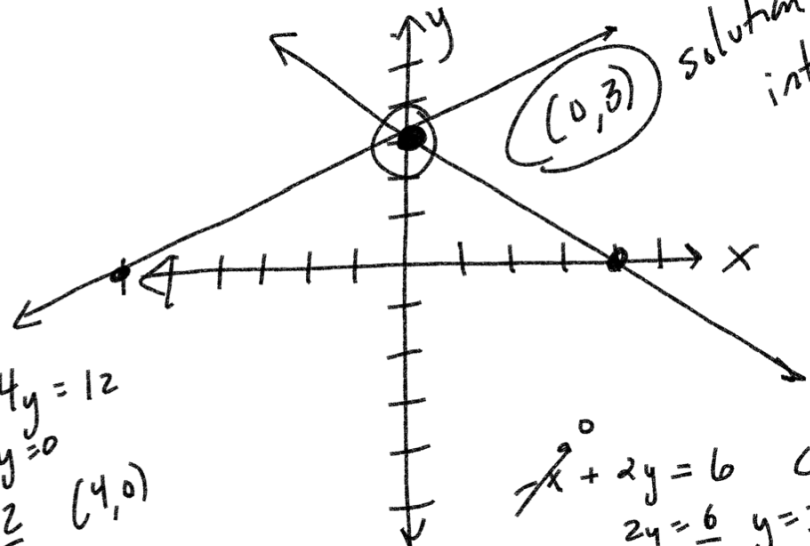
2, -1, -3



$$3x + 4y = 12$$

$$-x + 2y = 6$$

Graphing solution \rightarrow intersection



$$3x + 4y = 12$$

$$x=0 \quad \frac{4y}{4} = \frac{12}{4}$$

$$(0, 3) \quad y=3$$

$$3x + 4y = 12$$

$$y=0 \quad (4, 0)$$

$$\frac{3x}{3} = \frac{12}{3} \quad x=4$$

$$x + 2y = 6 \quad (0, 3)$$

$$\frac{2y}{2} = \frac{6}{2} \quad y=3$$

$$x = -6$$

$$(-6, 0) \quad -x + 2y = 6$$

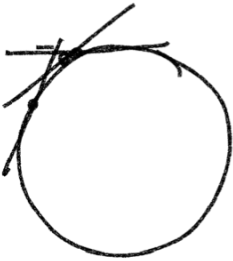
$$\frac{-x}{-1} = \frac{6}{-1} \quad x = -6$$

$$3x + 4y = 12$$

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

$$\begin{array}{r} -x = -2y + 6 \\ \hline -1 \quad \hline -1 \quad \hline -1 \end{array}$$

$$x = 2y - 6$$



substitution

$$3(2y - 6) + 4y = 12$$

$$\begin{array}{r} 6y - 18 + 4y = 12 \\ +18 \quad \quad +18 \end{array}$$

$$6y + 4y = 30$$

$$\frac{10y}{10} = \frac{30}{10}$$

$$y = 3$$

$$3x + 4y = 12 \quad (0, 3)$$

$$3x + 4(3) = 12$$

$$\begin{array}{r} 3x + 12 = 12 \\ -12 \quad -12 \end{array} \quad x = 0$$

$$\frac{3x}{3} = \frac{0}{3}$$

$$\begin{array}{r} 3x + 4y = 12 \\ 3(-x + 2y = 6) \end{array}$$

$$\begin{array}{r} \cancel{3x} + 4y = 12 \\ -\cancel{3x} + 6y = 18 \end{array}$$

$$\frac{10y}{10} = \frac{30}{10}$$

$$y = 3$$

$$3x + 4y = 12$$

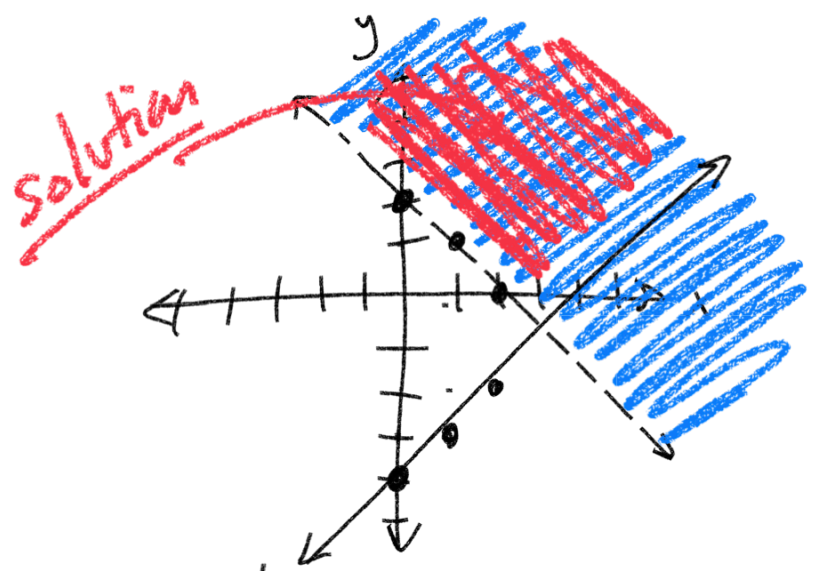
$$3x + 4(3) = 12$$

$$\begin{array}{r} 3x + 12 = 12 \\ -12 \quad -12 \end{array}$$

$$\frac{3x}{3} = \frac{0}{3}$$

$$x = 0$$

$$\begin{aligned}
 &0 \quad 0 \quad 0 > 2 \\
 &x + y > 2 \\
 &x - y \leq 4 \\
 &0 - 0 \leq 4
 \end{aligned}$$



$$\begin{aligned}
 &x + y = 2 \\
 &-x \quad -x \\
 &y > -x + 2
 \end{aligned}$$

$$\begin{aligned}
 &-x - y \leq 4 \\
 &-x \quad -x
 \end{aligned}$$

$$\begin{aligned}
 &-y \leq -x + 4 \\
 &\frac{-y}{-1} \leq \frac{-x + 4}{-1}
 \end{aligned}$$

$$y \geq x - 4$$

HW ch 3 Pre-test
Optimal HW 19
 Actual ch 3 Review
 Test 3 Due Feb 24th
 HW/quiz 17 due Feb 12th
 HW/quiz 18 due Feb 20th