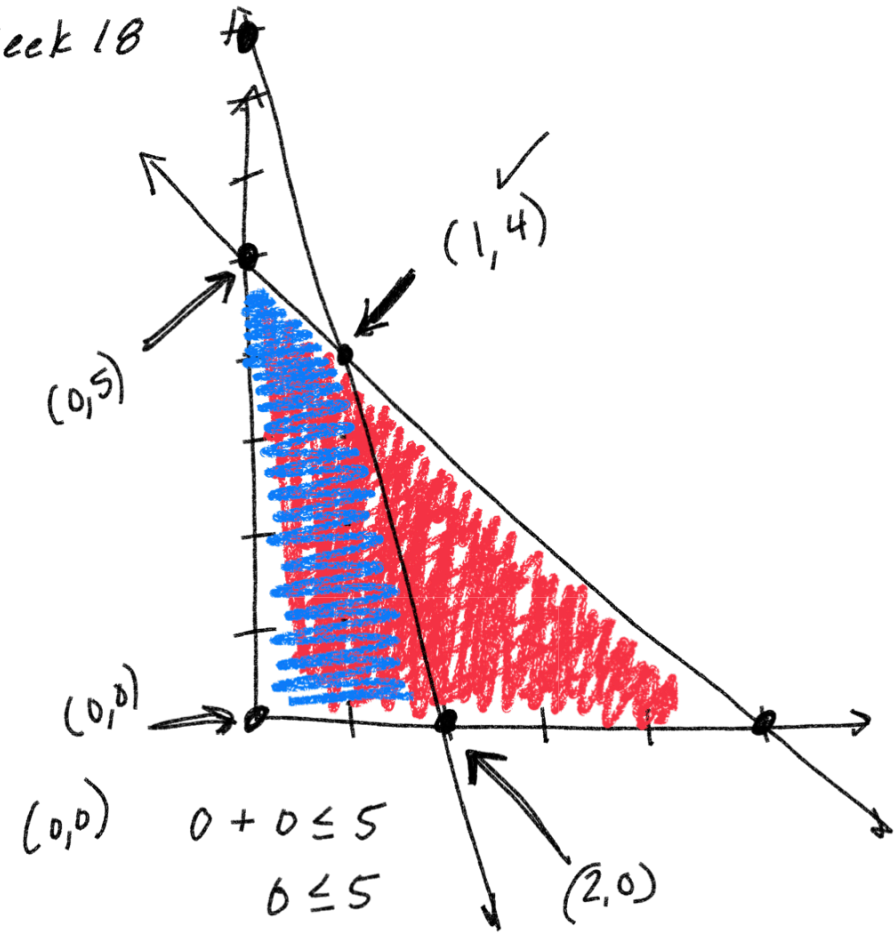
W-AZ Algebra 2 Week 18

$$\begin{cases} x + y \le 5 \\ 4x + y \le 8 \\ y \ge 0 \\ x \ge 0 \end{cases}$$ Quadrant I



$x + y \le 5$

$x = 0 \quad y = 5 \quad (0,5)$

$x + y \le 5 \quad (5,0)$

$x = 5 \quad y = 0$

$(0,0) \quad 0 + 0 \le 5$

$0 \le 5$

$4x + y \le 8$

$-4x \qquad -4x$

$y \le -4x + 8$

$(0,0)$

$0 \le -4(0) + 8$

$0 \le 8$

$(0,5)$

[Max $C = x + 3y$]

$(0,0)$	$0 + 3(0) = 0$
$(0,5)$	$0 + 3(5) = 15$
$(2,0)$	$2 + 3(0) = 2$
$(1,4)$	$1 + 3(4) = 13$

3-6

① $2x - y + 2z = 10$

② $4x + 2y - 5z = 10$

③ $x - 3y + 5z = 8$

$2(2x - y + 2z = 10)$

$4x + 2y - 5z = 10$

$4x - 2y + 4z = 20$

$+ \; 4x + 2y - 5z = 10$

$\{ 8x - z = 30 \}$

$x = 4$

$8x - z = 30$

$8(4) - z = 30$

$32 - z = 30$

$-32 \quad -32$

$\frac{-z}{-1} = \frac{-2}{-1}$

$z = 2$

x y z

$(4, 2, 2)$

(x, y, z)

$-3(2x - y + 2z = 10)$

① $2x - y + 2z = 10$

③ $x - 3y + 5z = 8$

$-6x + 3y - 6z = -30$

$x - 3y + 5z = 8$

$\{ -5x - z = -22 \}$

$-1(8x - z = 30)$

$-5x - z = -22$

$-8x + z = -30$

$-5x - z = -22$

$\frac{-13x}{-13} = \frac{-52}{-13}$

$x = 4$

$2x - y + 2z = 10$

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

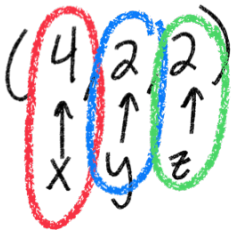
$8 - y + 4 = 10$

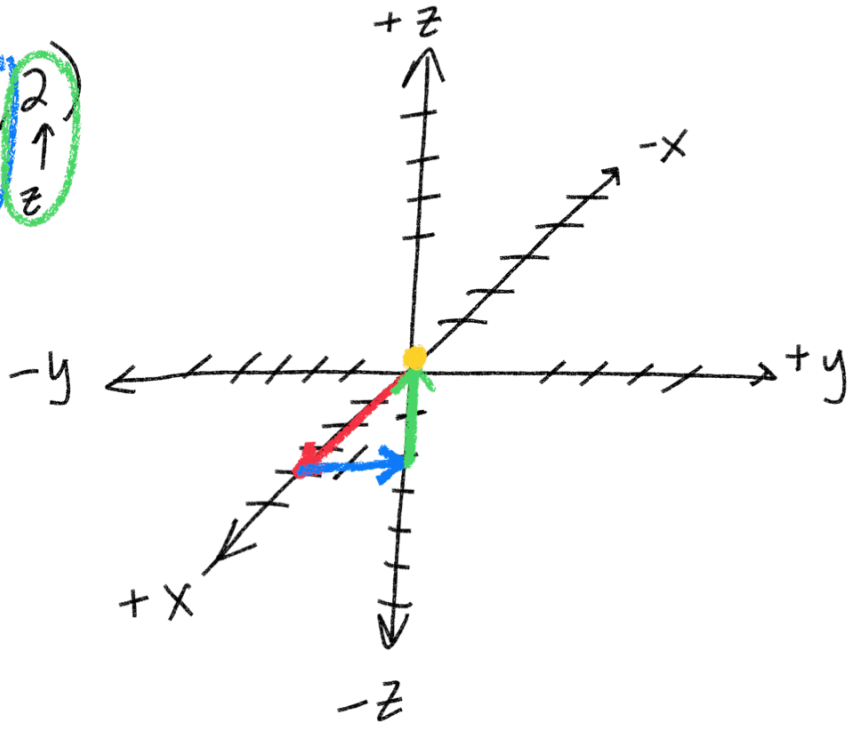
$12 - y = 10$

$-12 \quad -12$

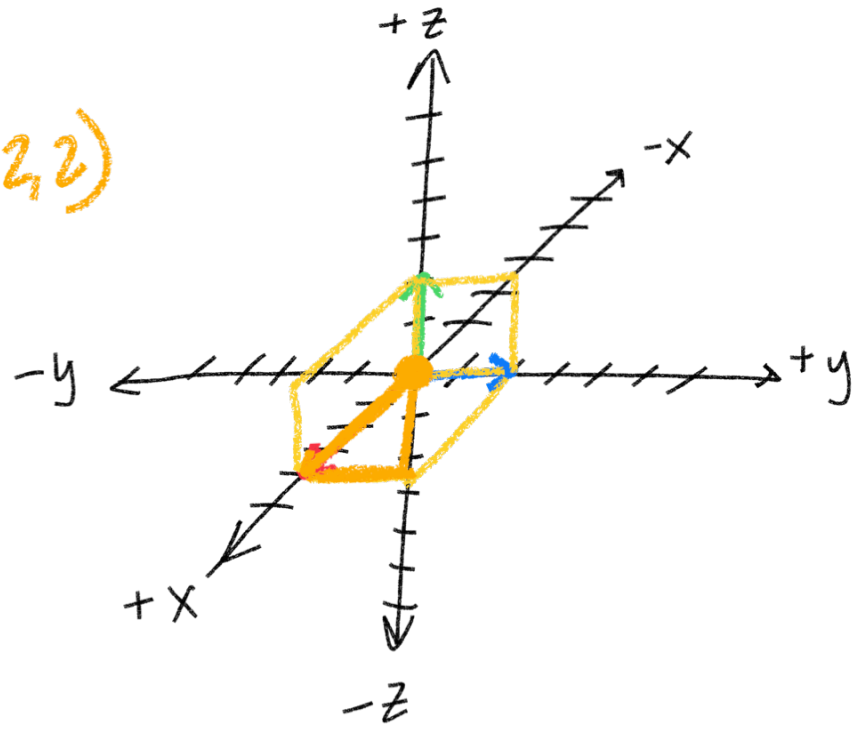
$\frac{-y}{-1} = \frac{-2}{-1}$

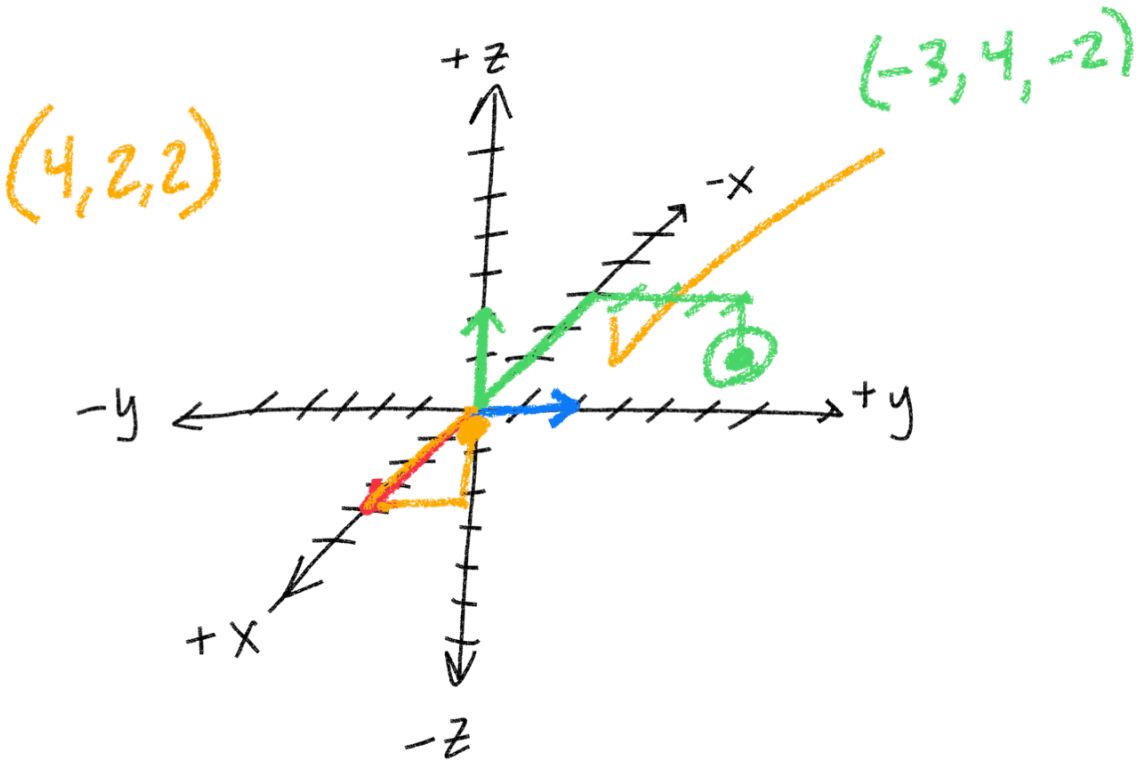
$y = 2$





(4,2,2)





HW

Ch 3.5 evens
Ch 3.6 even
Supplemental WS
Online HW 18 & Feb 17th
Quiz 18

HW/Quiz 16 due today
HW/Quiz 17 due Feb 10th