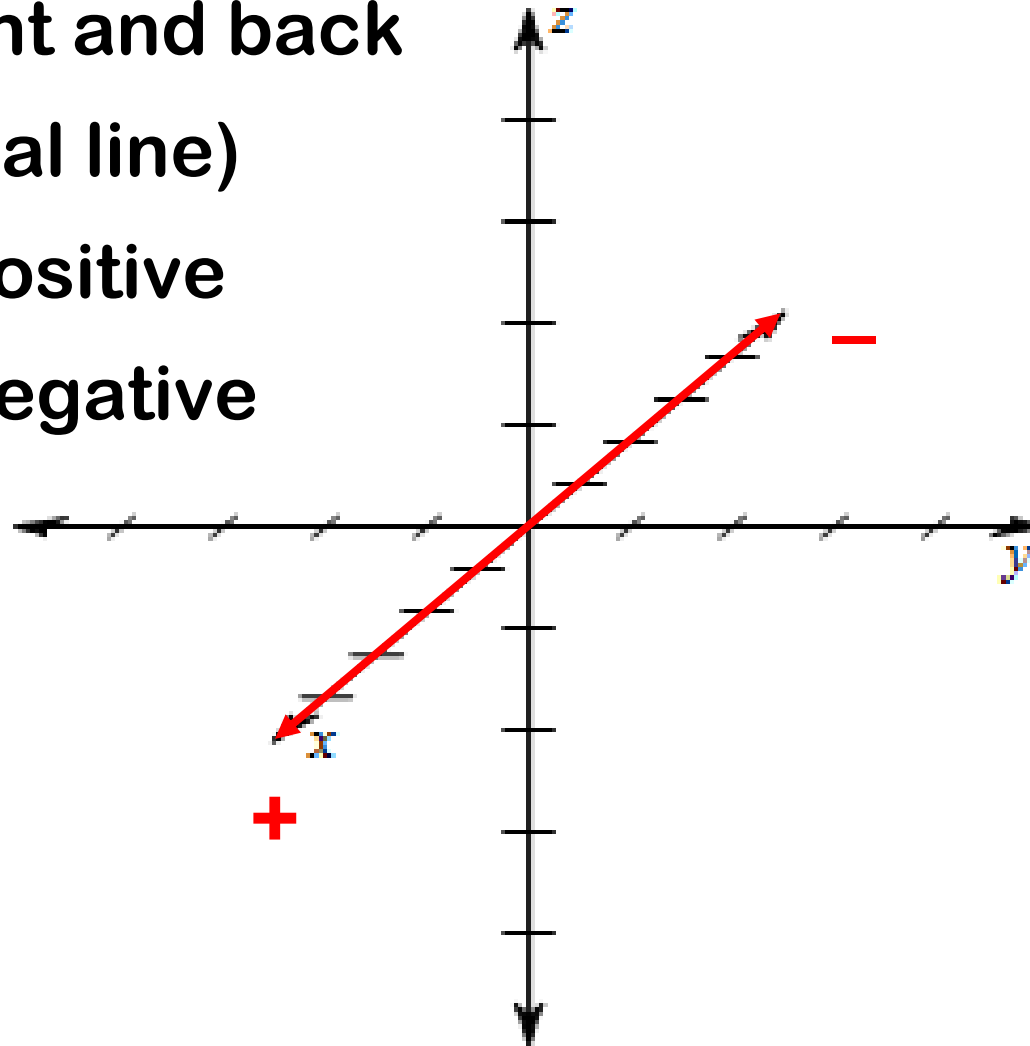


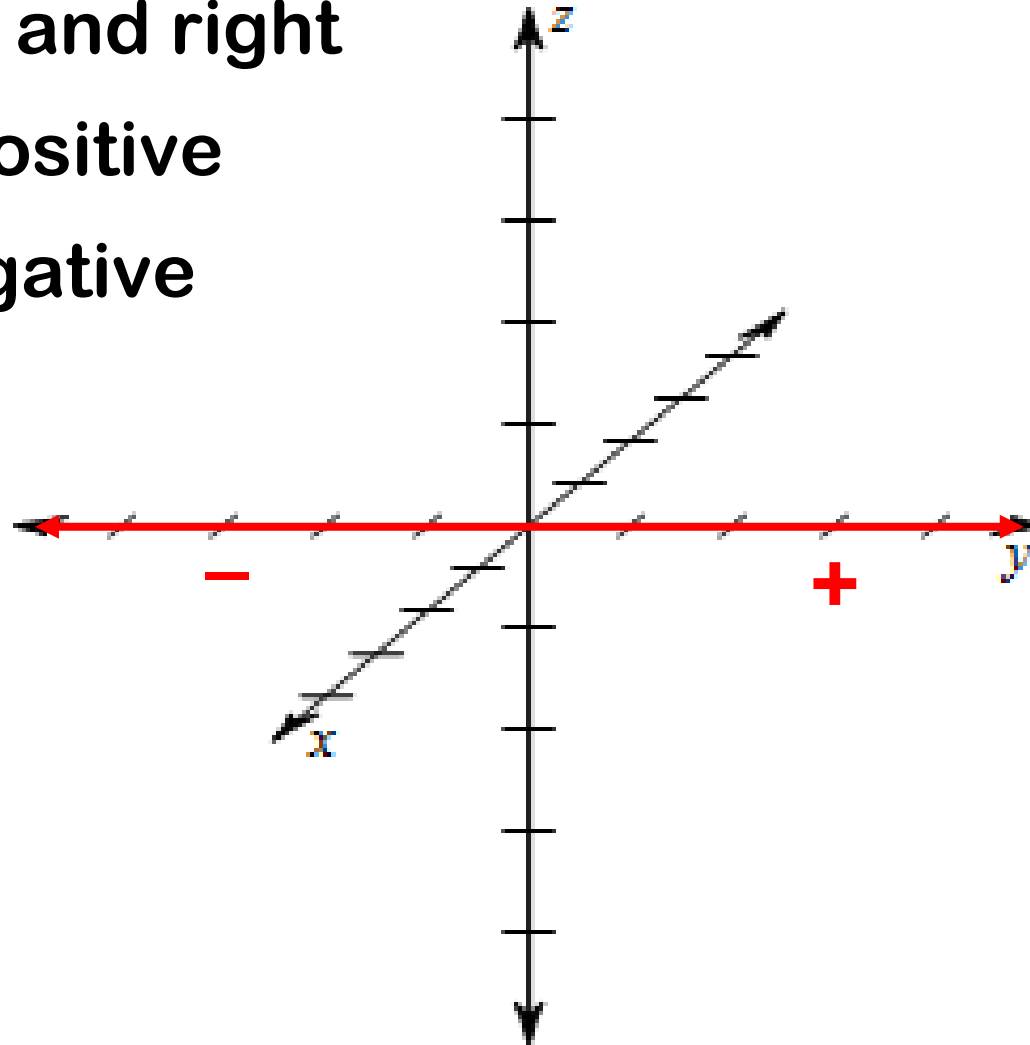
Bell Work

1. Find the solution for
$$\begin{cases} 2x + 3y = -9 \\ 5x - 2y = -32 \end{cases}$$
. Show all work
2. Solve and write the solution in interval notation.
$$4x + 3 \leq 35$$
3. Describe the transformation of the absolute value parent function. $f(x) = 4|x - 6| + 1$
4. What is the equation for the constant parent function?

x-axis: front and back
(diagonal line)
front: positive
back: negative



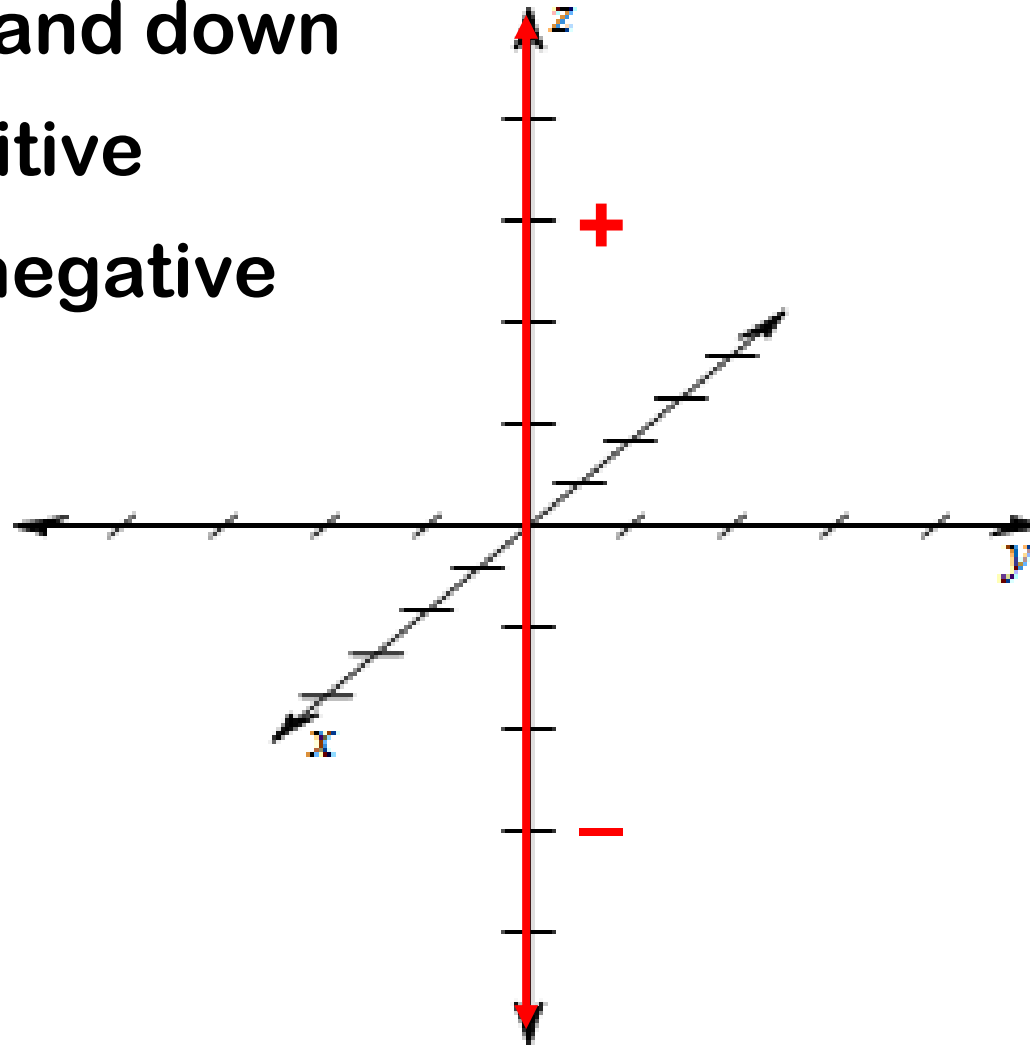
y-axis: left and right
right: positive
left: negative



z-axis: up and down

up: positive

down: negative

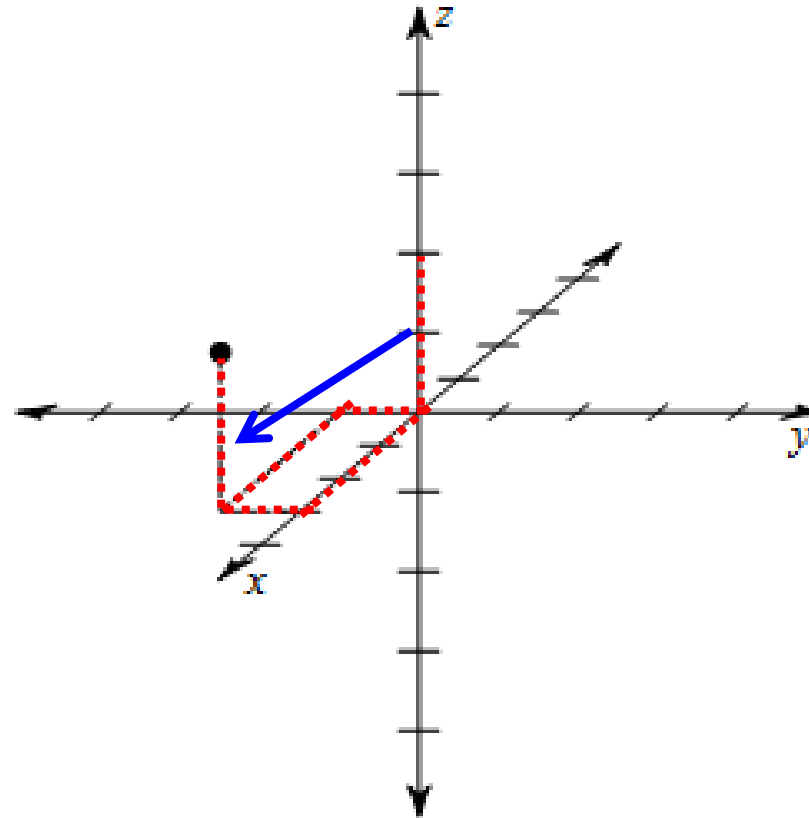


Forward 3

Left 1

Up 2

$(3, -1, 2)$

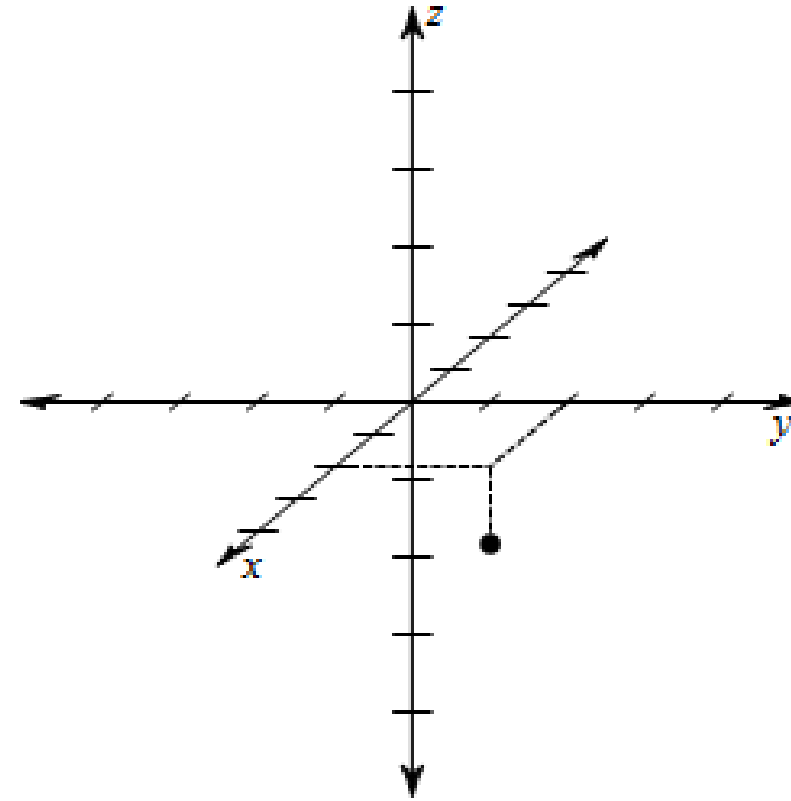


Forward 2

Right 2

Down 1

$(2, 2, -1)$

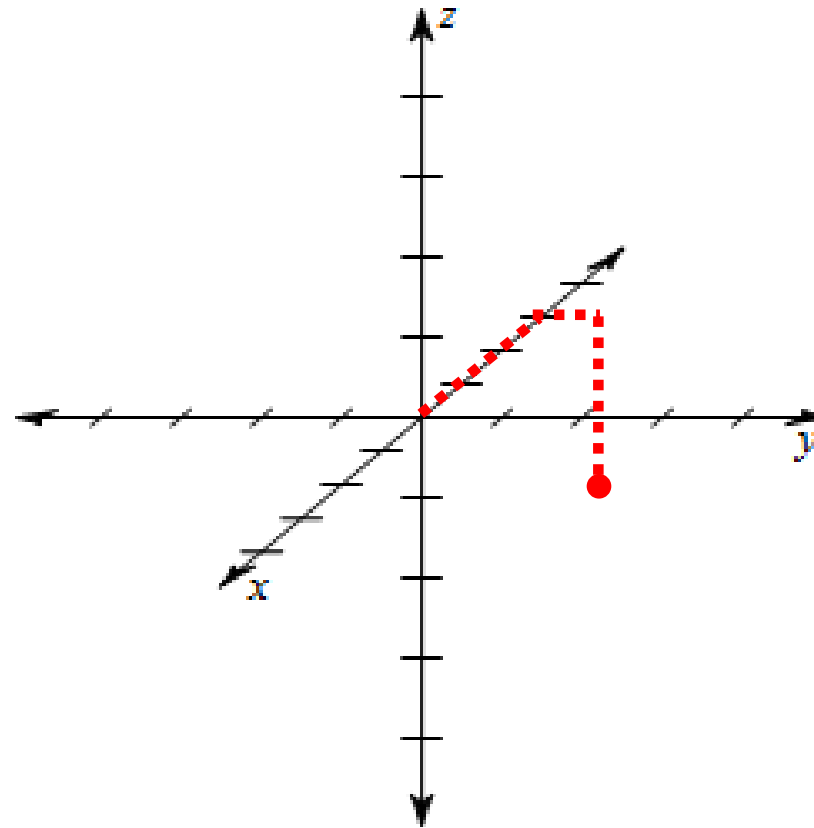


Graph $(-3, 1, -2)$.

Back 3,

Right 1,

Down 2

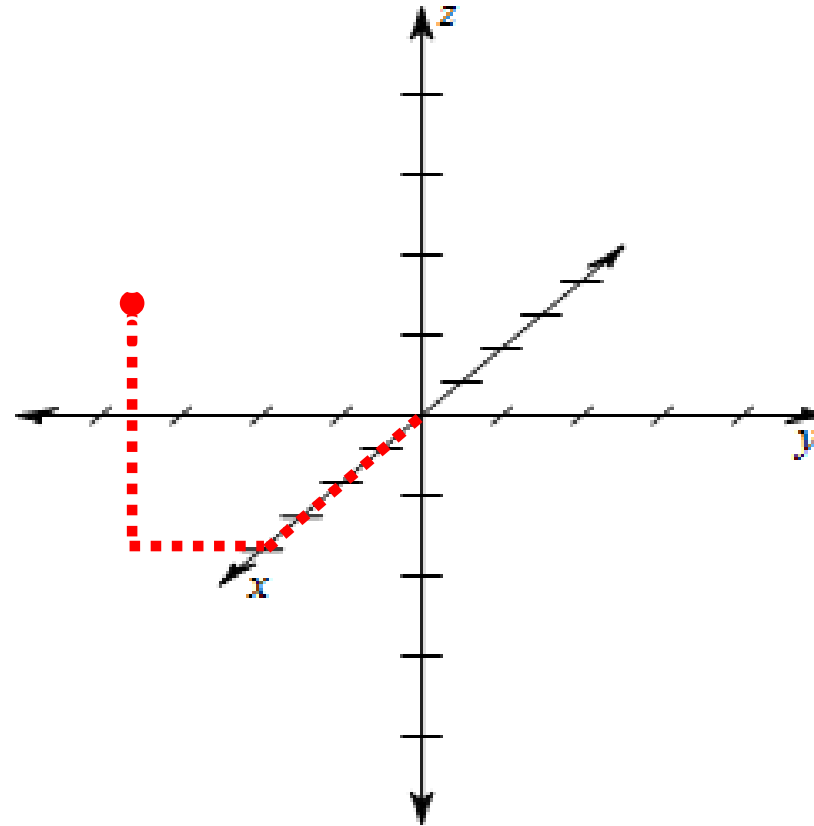


Graph $(4, -2, 3)$.

Forward 3,

Left 2,

Up 3

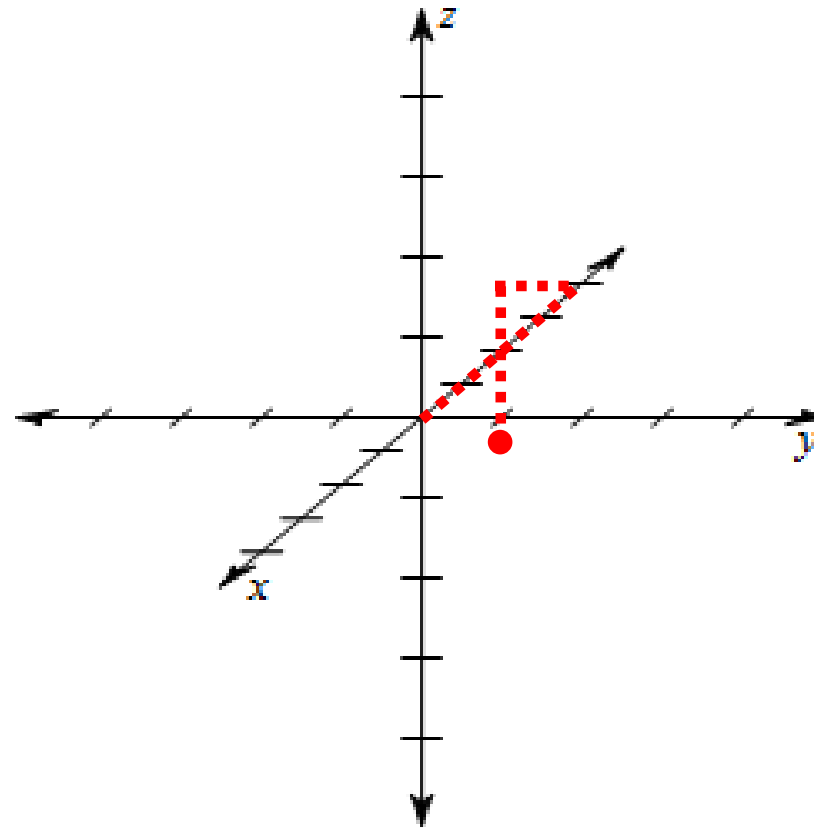


Graph $(-3, -1, -2)$.

Back 3,

Left 1,

Down 2



Graphing 3-D Equations

$$-4x + 3y - 12z = 12$$

$$-4x + 3(0) - 12(0) = 12$$

$$-4x = 12$$

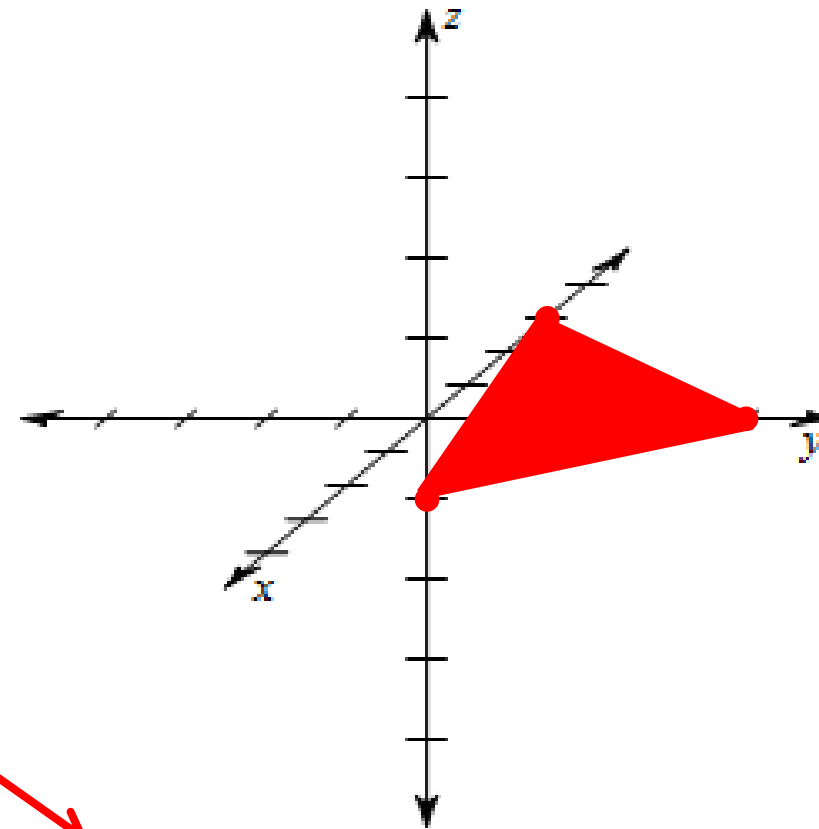
$$x = -3$$

$$-4(0) + 3y - 12(0) = 12$$

$$y = 4$$

$$-4(0) + 3(0) - 12z = 12$$

$$z = -1$$



$$(-3, 0, 0)$$

$$(0, 4, 0)$$

$$(0, 0, -1)$$

Graph the 3 points,
connect them, and then
shade in the triangle.

Graphing 3-D Equations

$$3x - 6y + 4z = 12$$

$$3x = 12$$

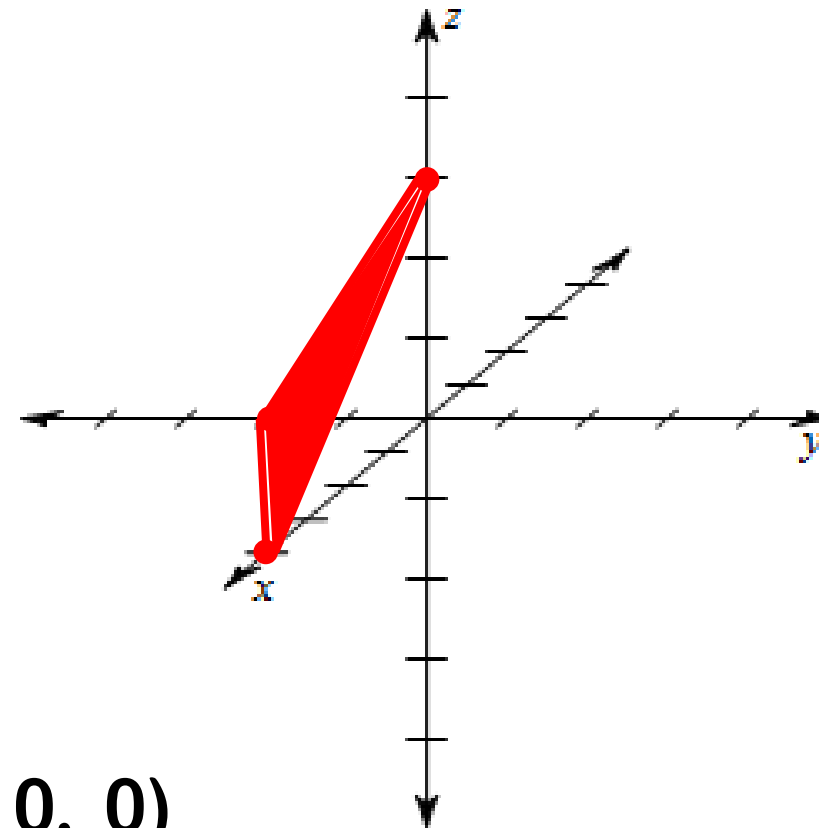
$$x = 4$$

$$-6y = 12$$

$$y = -2$$

$$4z = 12$$

$$z = 3$$



$$(4, 0, 0)$$

$$(0, -2, 0)$$

$$(0, 0, 3)$$

Graphing 3-D Equations

$$-\frac{2}{3}x - 2y + \frac{1}{2}z = 2$$

$$-\frac{2}{3}x = 2$$

$$x = -3$$

$$-2y = 2$$

$$y = -1$$

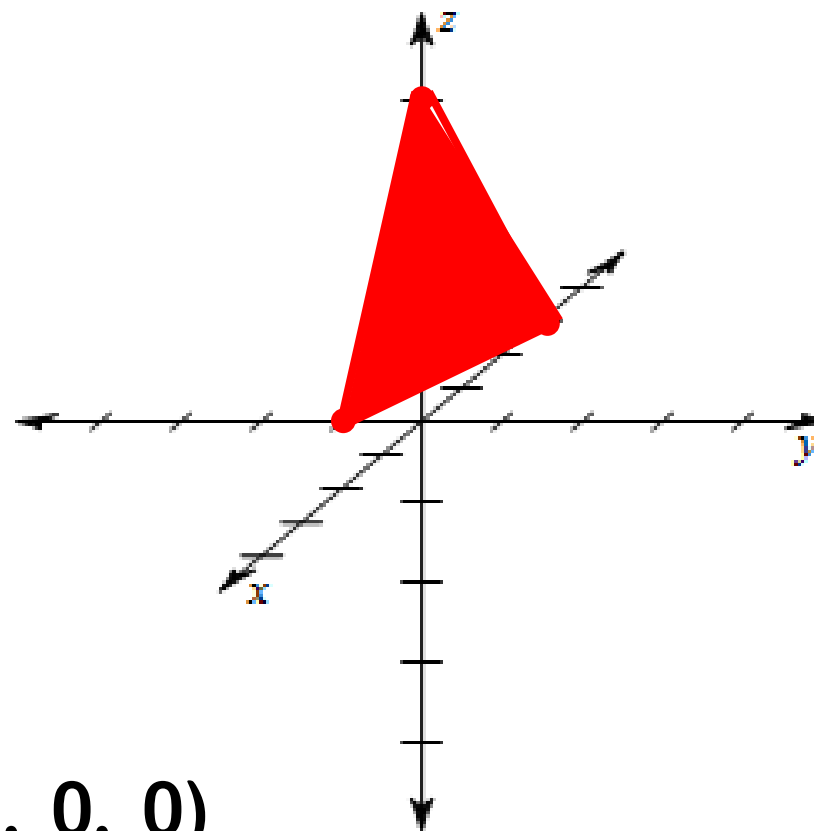
$$\frac{1}{2}z = 2$$

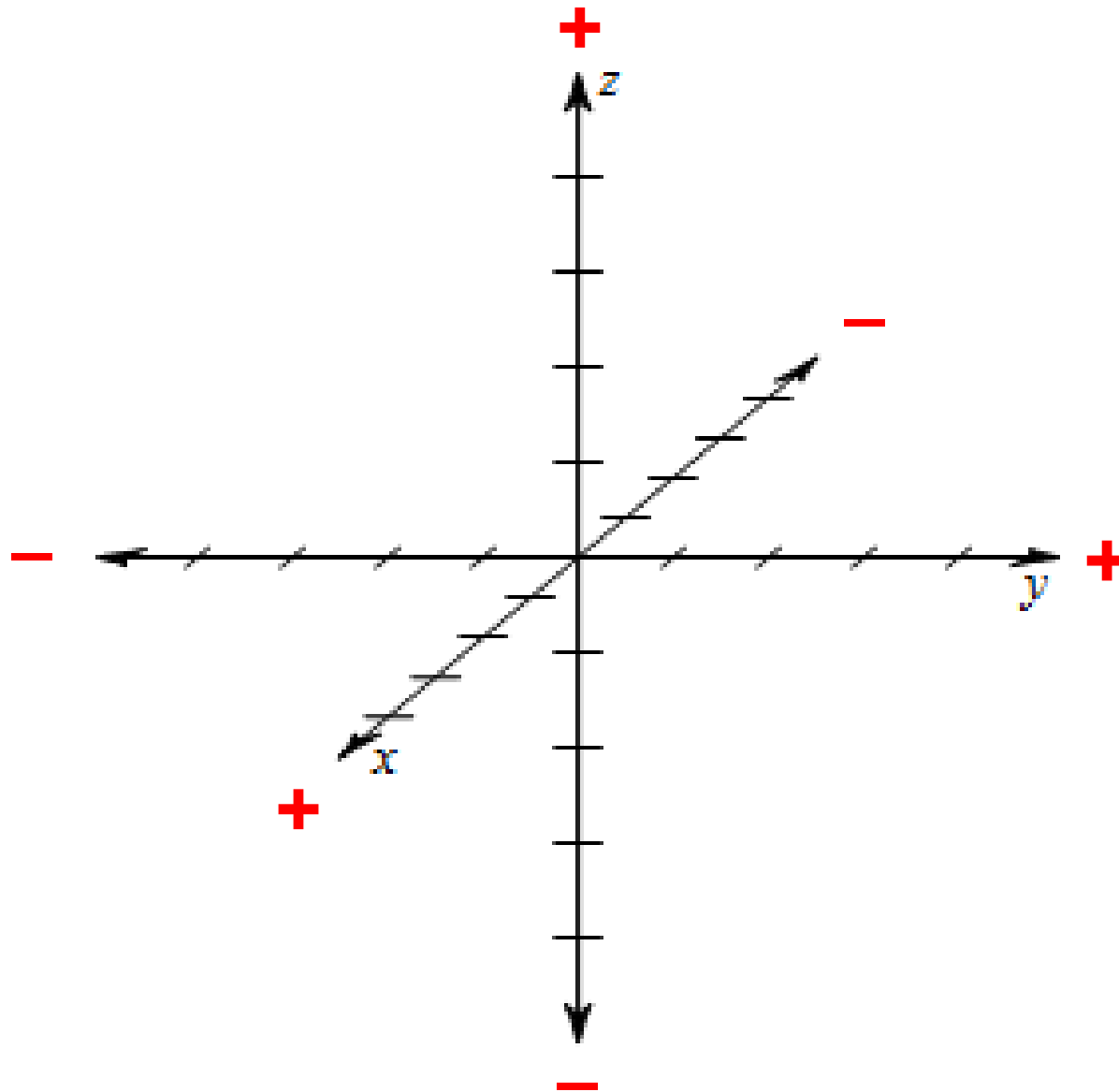
$$z = 4$$

$$(-3, 0, 0)$$

$$(0, -1, 0)$$

$$(0, 0, 4)$$





Assignment:

Page 216 # 10 – 23

Graph each point in three-dimensional space.

10. $(2, -4, 3)$

11. $(-1, 1, 4)$

12. $(3, 0, 0)$

13. $(1, -2, 0)$

14. $(-3, -3, -3)$

15. $(5, 0, 2)$

16. $(0, -3, 2)$

17. $(-4, -1, 1)$

Graph each linear equation in three-dimensional space.

18. $x + y - z = -1$

19. $2x - y + 2z = 4$

20. $2x + \frac{1}{2}y + z = -2$

21. $5x + y - z = -5$

22. $8x + 6y + 4z = 24$

23. $3x - 3y + 2.5z = 7.5$