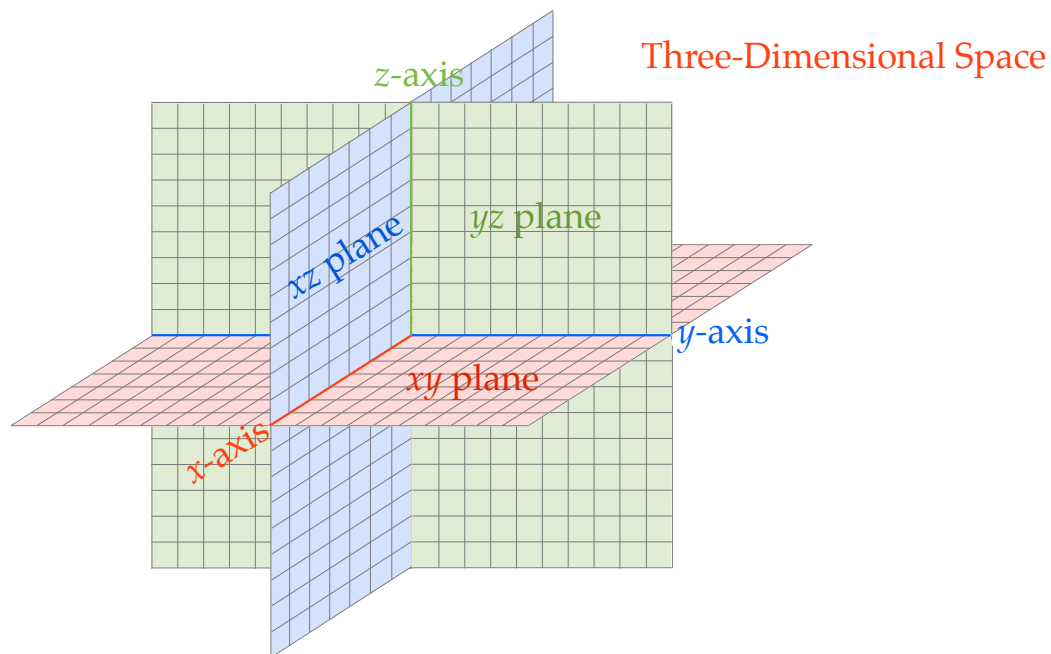
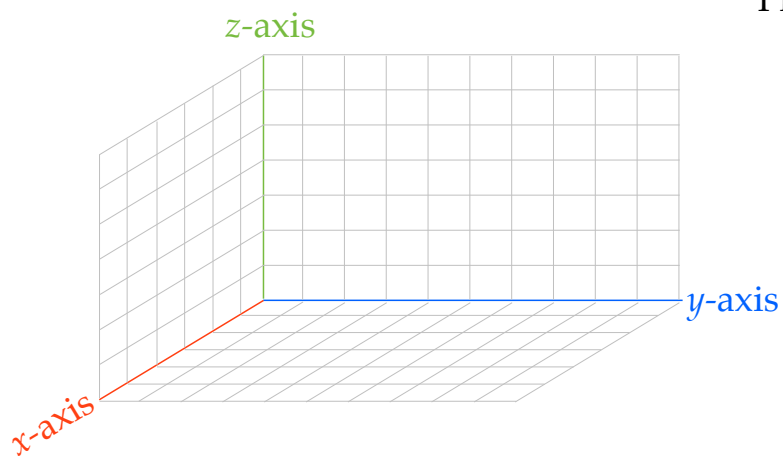




Three-Dimensional Space

Plotting points in Three-Dimensions

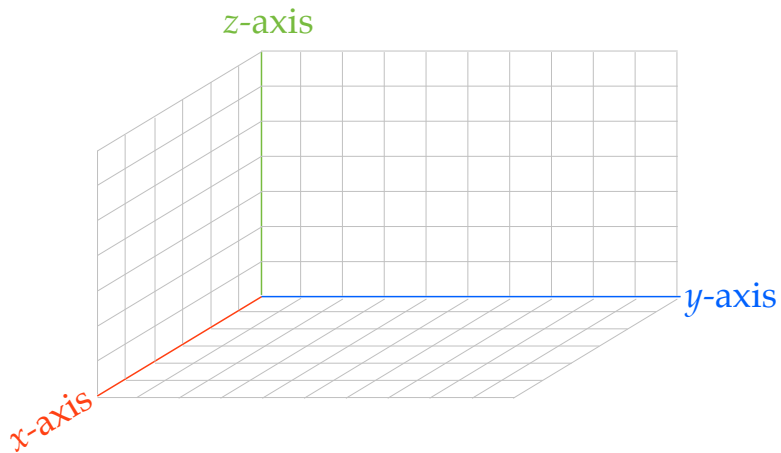


(3,4,3)

(5,2,7)

(1,6,2)

Graphing Equations in Three Dimensions



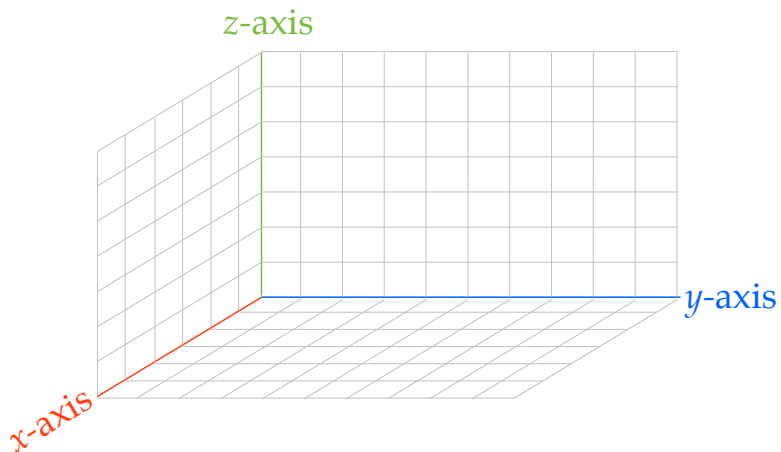
$$3x + 4y + 3z = 12$$

x-intercept: set $y = 0$ and $z = 0$

y-intercept: set $x = 0$ and $z = 0$

z-intercept: set $x = 0$ and $y = 0$

Graphing Equations in Three Dimensions



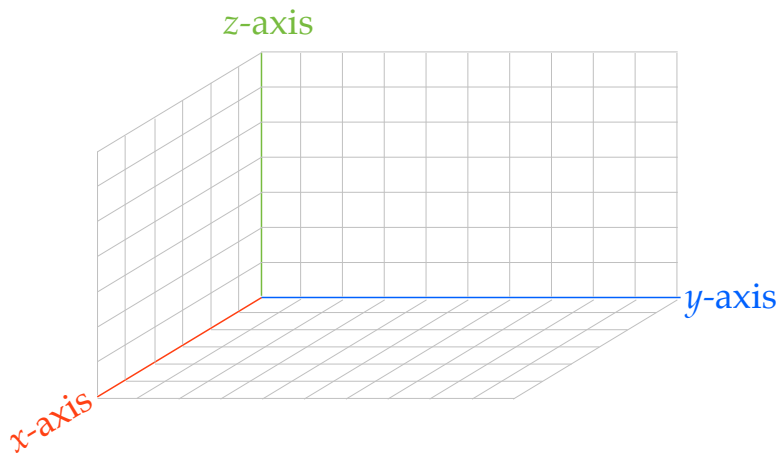
$$4x + 3y + 8z = 24$$

x-intercept: set $y = 0$ and $z = 0$

y-intercept: set $x = 0$ and $z = 0$

z-intercept: set $x = 0$ and $y = 0$

Graphing Equations in Three Dimensions



$$18x + 4y + 6z = 36$$

x-intercept: set $y = 0$ and $z = 0$

y-intercept: set $x = 0$ and $z = 0$

z-intercept: set $x = 0$ and $y = 0$

Plotting **points** in the
Three-Dimensional Space

(x, y, z)

x units parallel to x -axis

y units parallel to y -axis

z units parallel to z -axis

Graphing Equations in Three Dimensions

x-intercept: set $y = 0$ and $z = 0$

$(x, 0, 0)$

y-intercept: set $x = 0$ and $z = 0$

$(0, y, 0)$

z-intercept: set $x = 0$ and $y = 0$

$(0, 0, z)$