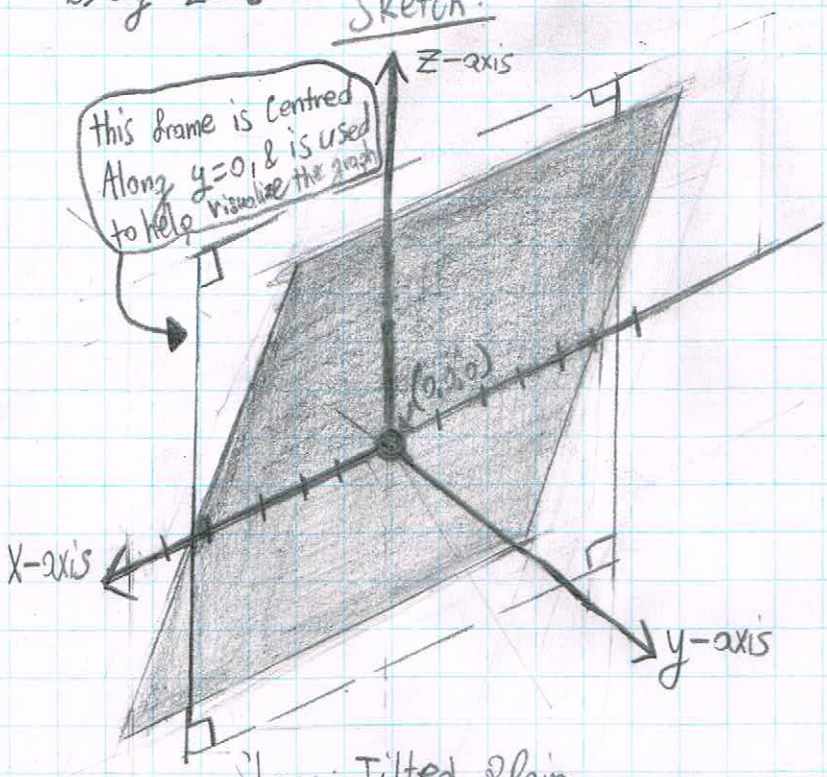
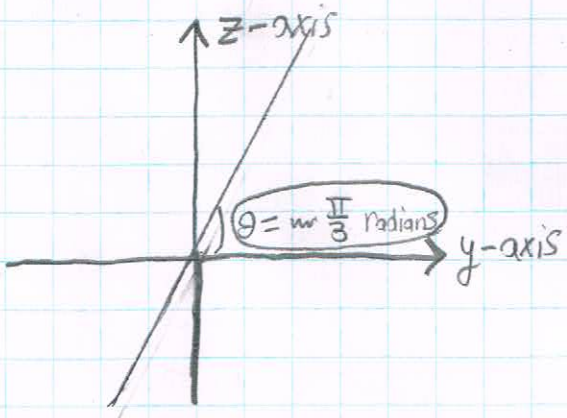
b) $2y - z = 0$

Sketch:



Shape: Tilted Plain

(Side view: facing the x-axis)



Note:

this line can be seen as: $2x = y$ on a 2D graph (i.e. when the 3D version is viewed down the y-axis).

z-intercept:

When $y = 0$:

$z = 0$

y-intercept:

When $z = 0$:

$y = 0$

x-axis:

x is not in equation, thus $x \in \mathbb{R}$

Shape:

- The equation is of the form: $\frac{2y}{9} - \frac{z}{9} = 0$, thus the shape is a tilted plain which travels through the y & z dimensions, & is free along the x dimension.
- thus, the plain can be seen as infinitly many lines parallel along x-axis travelling through the z & y axises.
- The plain is tilted towards the z-axis, which is hard to see in the main sketch.
  - The plain itself is tilted $\approx \frac{1}{3}$ towards the z-axis & $\approx \frac{2}{3}$ towards the y-axis!