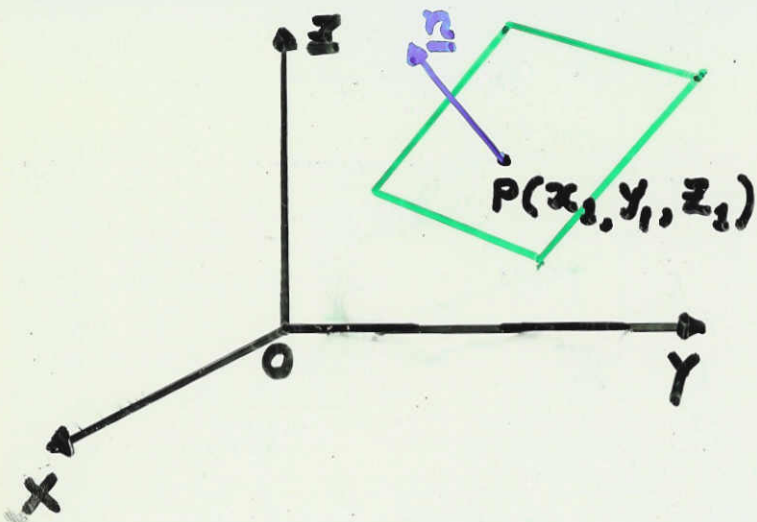


EQUATION OF A PLANE IN SPACE



Suppose $P(x_1, y_1, z_1)$ is a point on the plane. Suppose further that $\underline{n} = \langle a, b, c \rangle$ is any normal vector to the plane.

Then, the equation of the plane can be written as :

$$a(x - x_1) + b(y - y_1) + c(z - z_1) = 0$$

By multiplying out & rearranging one can rewrite

$$ax + by + cz + d = 0$$

proof: