

$$\text{Resolvemos } \frac{|c+2|}{\sqrt{3} \times \sqrt{2+c^2}} = \frac{\sqrt{3}}{2}$$

$$\Leftrightarrow |c+2| = \frac{3}{2} \sqrt{2+c^2}$$

$$\Leftrightarrow |c+2|^2 = \frac{9}{4} (2+c^2)$$

$$\Leftrightarrow c^2 + 4c + 4 = \frac{9}{2} + \frac{9}{4}c^2$$

$$\Leftrightarrow \frac{5}{4}c^2 - 4c + \frac{1}{2} = 0$$

$$\Delta = \frac{27}{2} = \left(\frac{3\sqrt{6}}{2}\right)^2$$

$$c_1 = \frac{4 - \frac{3\sqrt{6}}{2}}{\frac{5}{2}} = \frac{8 - 3\sqrt{6}}{5}$$

$$c_2 = \frac{4 + 3\sqrt{6}}{\frac{5}{2}} = \frac{8 + 3\sqrt{6}}{5}$$

los planos buscados son:

$$\pi_1 \equiv 5x - 5y + (8 - 3\sqrt{6})z + 5 = 0$$

$$\pi_2 \equiv 5x - 5y + (8 + 3\sqrt{6})z + 5 = 0$$