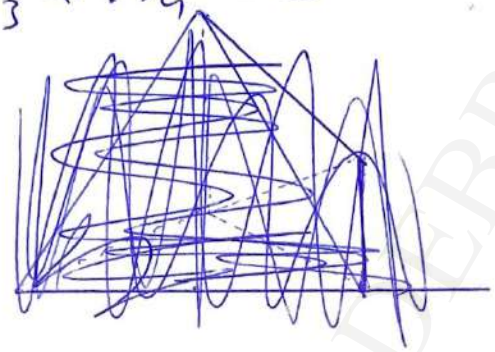
6)

$$n_i = \frac{1}{2}(\vec{a} \times \vec{b})$$

$$n_1 = \frac{1}{2} \cdot (a \times b) \qquad n_2 = \frac{1}{2} \cdot (b \times c) \qquad n_3 = \frac{1}{2} \cdot (c \times f) \qquad n_4 = \frac{1}{2} \cdot (d \times f)$$

$$n_1 + n_2 + n_3 + n_4 = 0$$



Tetrahedron