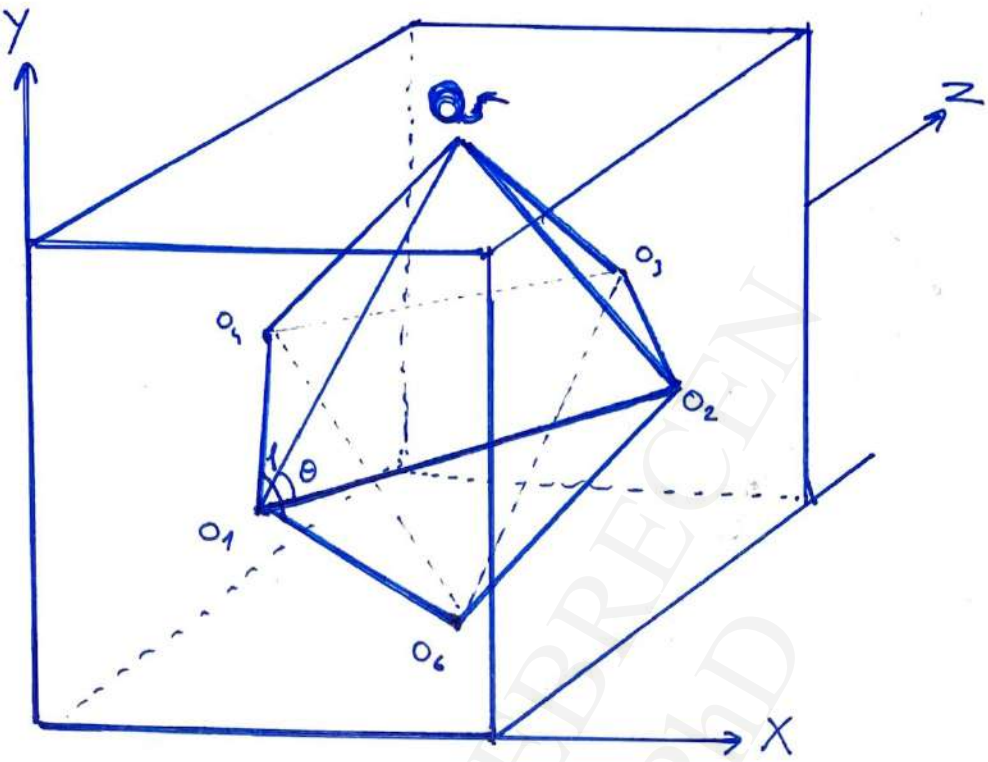
7)

$p \cdot q = |p| \cdot |q| \cdot \cos\theta$



$O_{12} = \overrightarrow{O_1O_2} = (0.5, 0.5, 0) \longrightarrow \overrightarrow{O_2O_5} (1, 0.5, 0.5) = (0.5, 0, 0.5)$

$O_{14} = \overrightarrow{O_1O_4} = (0.5, 0.5, 0) \longrightarrow \overrightarrow{O_4O_5} (0, 0.5, 0.5) = (-0.5, 0, 0.5)$

$O_{15} = (0.5, 0.5, 0) \longrightarrow (0.5, 1, 0.5) = (0, 0.5, 0.5)$

$O_{16} = \overrightarrow{O_1O_6} (0.5, 0.5, 0) \longrightarrow \overrightarrow{O_6O_5} (0.5, 0, 0.5) = (0, -0.5, 0.5)$

$|O_{12}| = \sqrt{\left(\frac{1}{2}\right)^2 + 0^2 + \left(\frac{1}{2}\right)^2} = \sqrt{\frac{1}{2}}$

$|O_{15}| = \sqrt{0^2 + \left(\frac{1}{2}\right)^2 + \left(\frac{1}{2}\right)^2} = \sqrt{\frac{1}{2}}$

$|O_{16}| = \sqrt{0^2 + \left(-\frac{1}{2}\right)^2 + \left(\frac{1}{2}\right)^2} = \sqrt{\frac{1}{2}}$

$|O_{14}| = \sqrt{\left(-\frac{1}{2}\right)^2 + 0^2 + \left(\frac{1}{2}\right)^2} = \sqrt{\frac{1}{2}}$

$O_{12} \cdot O_{15} = |O_{12}| \cdot |O_{15}| \cdot \cos\theta$

$\frac{1}{4} = \sqrt{\frac{1}{2}} \cdot \sqrt{\frac{1}{2}} \cdot \cos\theta$

$\frac{1}{4} = \frac{1}{2} \cdot \cos\theta$

$\frac{1}{2} = \cos\theta \longrightarrow \arccos$

$60° = \theta$

$O_{14} \cdot O_{16} = |O_{14}| \cdot |O_{16}| \cdot \cos\ell$

$\frac{1}{4} = \sqrt{\frac{1}{2}} \cdot \sqrt{\frac{1}{2}} \cdot \cos\ell$

$\frac{1}{4} = \frac{1}{2} \cdot \cos\ell$

$\frac{1}{2} = \cos\ell \longrightarrow \arccos$

$60° = \ell$