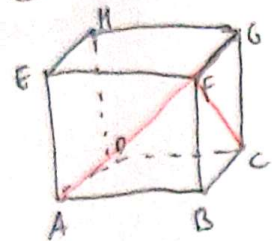


(a)  $AG \perp CF$



AG terletak pada ABGH  
CF terletak pada BCGF

$$AB \perp BC$$

$$AB \perp BF$$

$$AB \perp BCGF$$

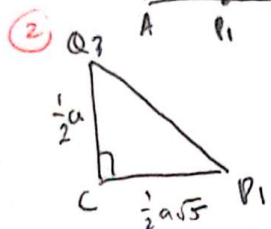
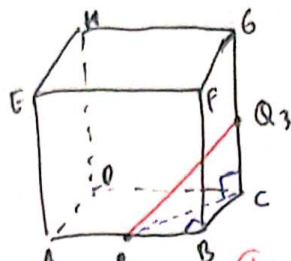
$$AB \perp CF$$

$$CF \perp AB$$

$$CF \perp BG$$

$$CF \perp ABGH \rightarrow CF \perp \underline{AG} \text{ (terbukti)}$$

(b)  $P_1, Q_3$

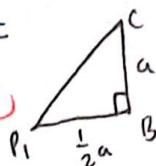


$$P_1Q_3 = \sqrt{\left(\frac{1}{2}a\right)^2 + \left(\frac{1}{2}a\sqrt{5}\right)^2}$$

$$P_1Q_3 = \sqrt{\frac{1}{4}a^2 + \frac{5}{4}a^2}$$

$$P_1Q_3 = \sqrt{\frac{6}{4}a^2}$$

$$P_1Q_3 = \underline{\underline{\frac{1}{2}a\sqrt{6} \text{ cm.}}}$$



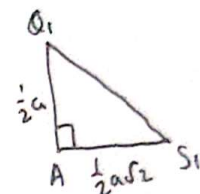
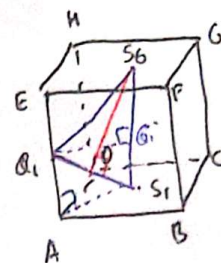
$$P_1C = \sqrt{a^2 + \left(\frac{1}{2}a\right)^2}$$

$$P_1C = \sqrt{a^2 + \frac{1}{4}a^2}$$

$$P_1C = \sqrt{\frac{5}{4}a^2}$$

$$P_1C = \underline{\underline{\frac{1}{2}a\sqrt{5} \text{ cm.}}}$$

(c)  $S_6, Q_1, S_1$

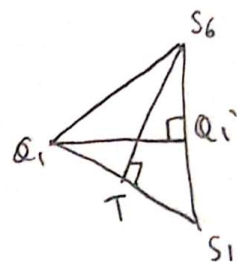


$$Q_1S_1 = \sqrt{\left(\frac{1}{2}a\right)^2 + \left(\frac{1}{2}a\sqrt{2}\right)^2}$$

$$Q_1S_1 = \sqrt{\frac{1}{4}a^2 + \frac{2}{4}a^2}$$

$$Q_1S_1 = \sqrt{\frac{3}{4}a^2}$$

$$Q_1S_1 = \underline{\underline{\frac{1}{2}a\sqrt{3} \text{ cm.}}}$$



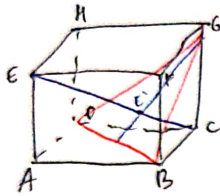
$$L_D = L_D$$

$$\frac{1}{2} \cdot S_6T \cdot S_1Q_1 = \frac{1}{2} \cdot S_1S_6 \cdot Q_1Q_1'$$

$$S_6T \cdot \frac{1}{2}a\sqrt{3} = a \cdot \frac{1}{2}a$$

$$S_6T = \underline{\underline{\frac{1}{3}a\sqrt{3} \text{ cm.}}}$$

(d) E ke BDG

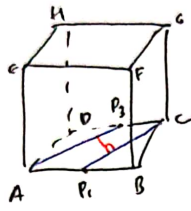


$$EE' = \frac{2}{3} EC$$

$$EE' = \frac{2}{3} \cdot a\sqrt{3}$$

$$EE' = \frac{2}{3} a\sqrt{3} \text{ cm.}$$

(e) AP<sub>3</sub> ke P<sub>1</sub>C



$$P_4B = \sqrt{\left(\frac{1}{2}a\right)^2 + a^2}$$

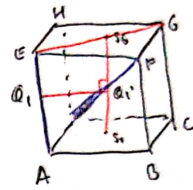
$$P_4B = \sqrt{\frac{1}{4}a^2 + a^2}$$

$$P_4B = \frac{1}{2}a\sqrt{5} \text{ cm}$$

$$t = \frac{1}{5} \cdot \frac{1}{2} a\sqrt{5}$$

$$t = \frac{1}{5} a\sqrt{5} \text{ cm.}$$

(f) AE ke DF

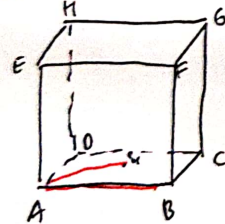


$$Q_1Q_1' = \frac{1}{2} EG$$

$$Q_1Q_1' = \frac{1}{2} \cdot a\sqrt{2}$$

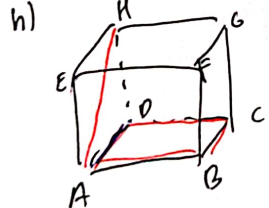
$$Q_1Q_1' = \frac{1}{2} a\sqrt{2} \text{ cm.}$$

g) AS<sub>1</sub> pada AB



$$AP_1 = \frac{1}{2} a \text{ cm}$$

h) AH pada ABCD



proyeksi : AD  
panjang proyeksi : a cm.