

Dimensi 3

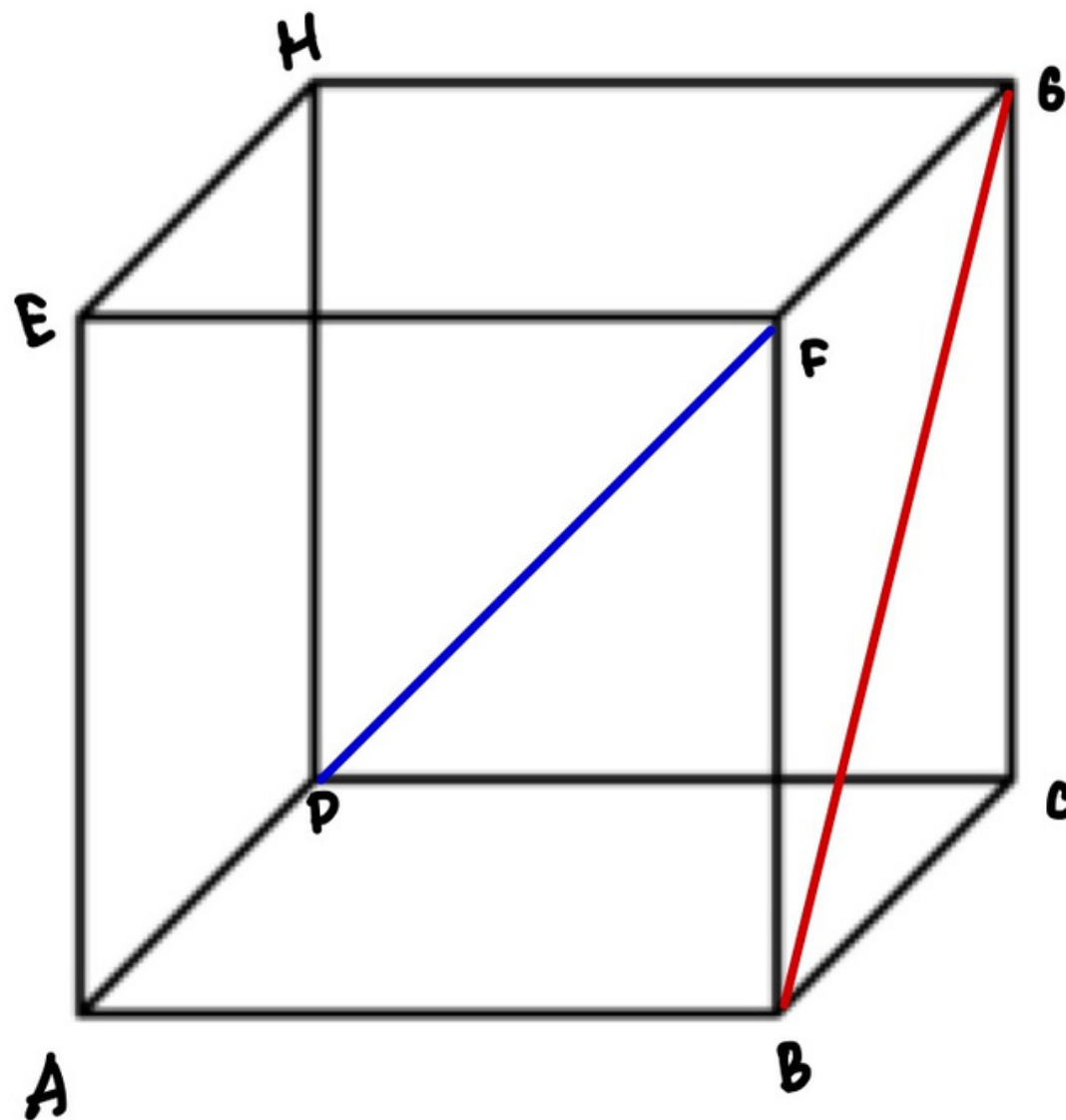




- **Christian Danny / 09**
- **Christoper Kevin / 11**
- **Meitha Christy / 28**
- **Natalie Angelina / 29**



a. Buktikan $BG \perp DF$

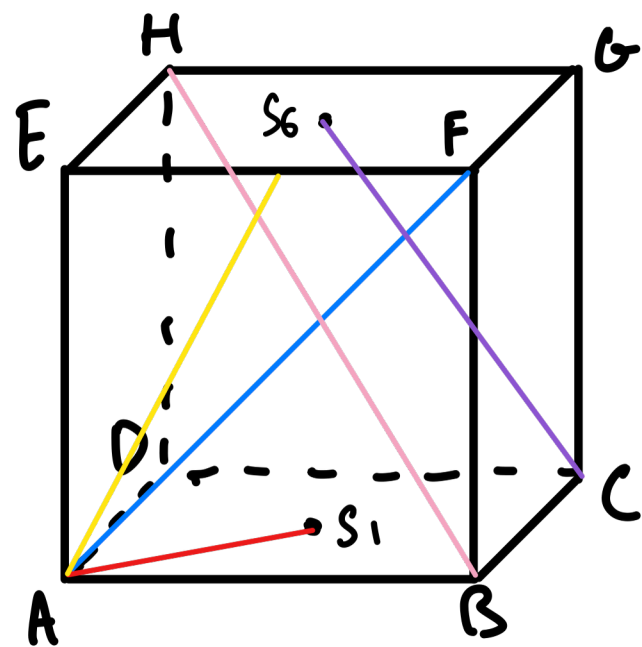


$$\left. \begin{array}{l} BG \perp FC \\ BG \perp CD \end{array} \right\} BG \perp CDEF$$

$$DF \perp CDEF$$

Maka, $BG \perp DF$

b. jarak titik ke titik



• A ke F = $a\sqrt{2}$

• A ke S₁ = $\frac{1}{2}a\sqrt{2}$

• B ke H = $a\sqrt{3}$

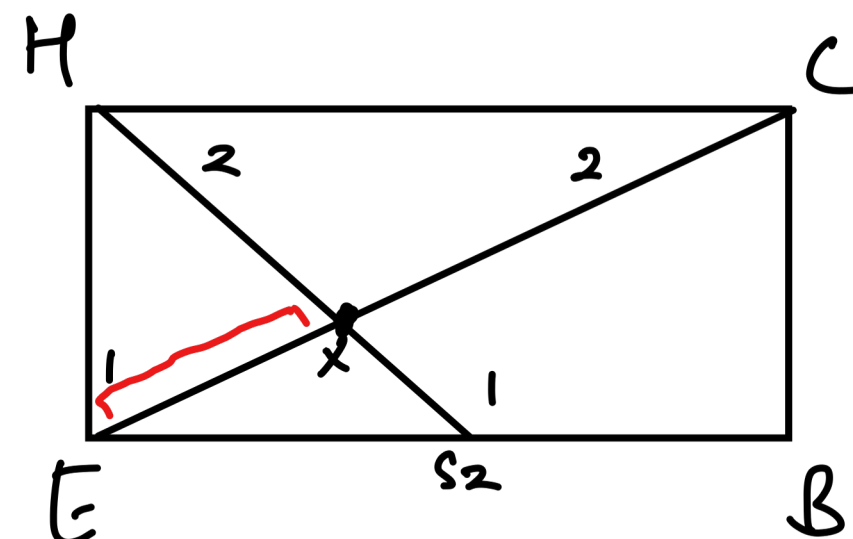
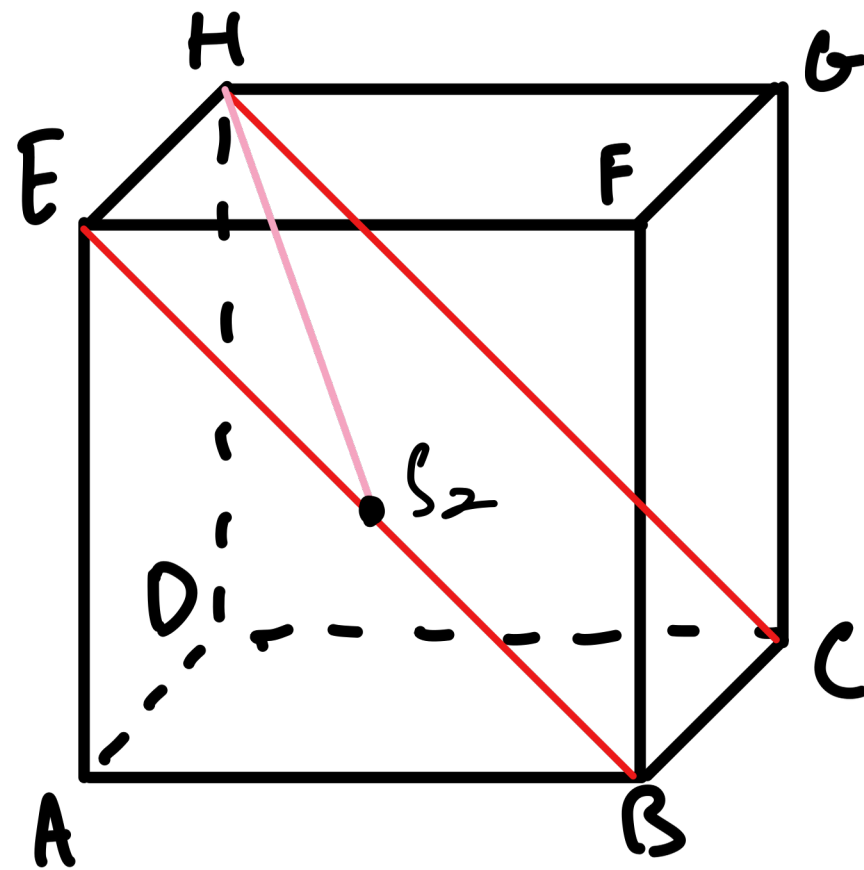
• A ke R₁ = $\frac{1}{2}a\sqrt{5}$

• C ke S₆ = $\frac{1}{2}a\sqrt{6}$

$$\begin{aligned} &\sqrt{a^2 + \frac{1}{4}a^2} \\ &= \sqrt{\frac{5}{4}a^2} \\ &= \frac{1}{2}a\sqrt{5} \end{aligned}$$

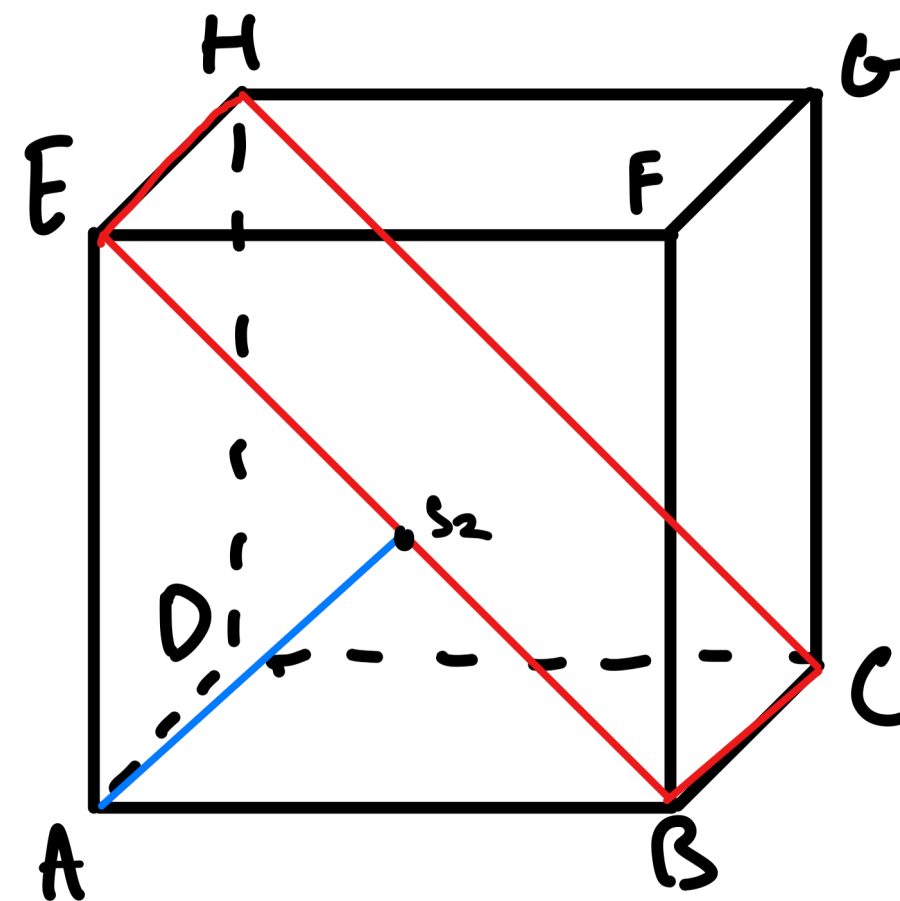
$$\begin{aligned} &\sqrt{a^2 + \left(\frac{1}{2}a\sqrt{2}\right)^2} \\ &= \sqrt{a^2 + \frac{1}{2}a^2} \\ &= \sqrt{\frac{3}{2}a^2} \\ &= \frac{\sqrt{3}}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}} \cdot a \\ &= \frac{\sqrt{6}}{2}a \end{aligned}$$

C. Jorale difik le garis
E le HS₂



$$= \frac{1}{3} a\sqrt{3}$$

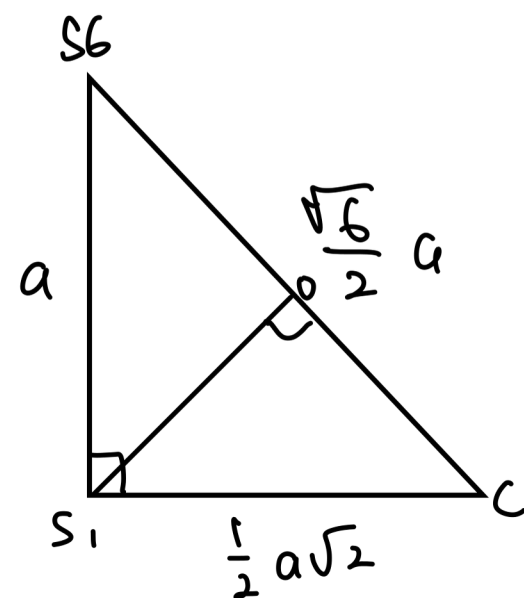
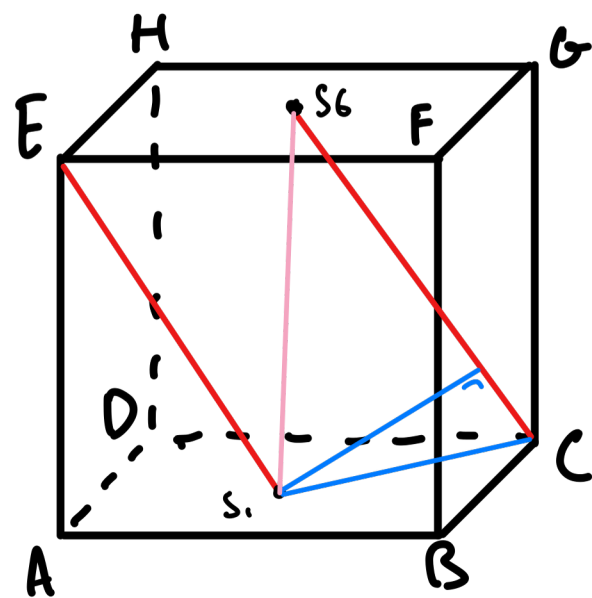
d. Jarak titik ke bidang
A ke BCEH



$$E \text{ ke } B = a\sqrt{2}$$

$$A \text{ ke } S_2 = \frac{1}{2} a\sqrt{2}$$

e. jarak dua garis sejajar
 ES_1 dan CS_6



$$CS_1 = \frac{1}{2} \cdot AC$$

$$= \frac{1}{2} a \sqrt{2}$$

$$CS_6 = \sqrt{a^2 + \left(\frac{1}{2} a \sqrt{2}\right)^2}$$

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

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

$$= \frac{\sqrt{6}}{2} a$$

$$\triangle 1 = \triangle 2 \text{ S.O}$$

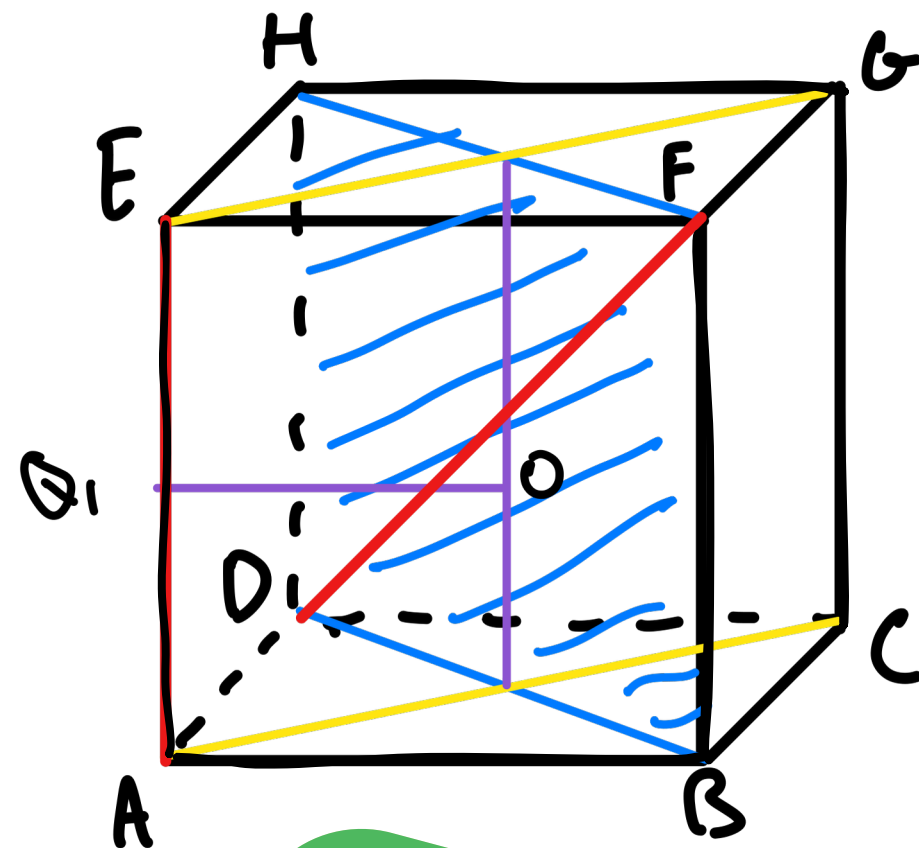
$$\frac{1}{2} \cdot \frac{1}{2} a \sqrt{2} \cdot a = \frac{1}{2} \cdot \frac{1}{2} a \sqrt{6}$$

$$\frac{\sqrt{2}}{\sqrt{6}} a = \text{S.O}$$

$$\frac{\sqrt{2}}{\sqrt{6}} \cdot \frac{\sqrt{6}}{\sqrt{6}} = \text{S.O}$$

$$\frac{\sqrt{3}}{3} a = \text{S.O}$$

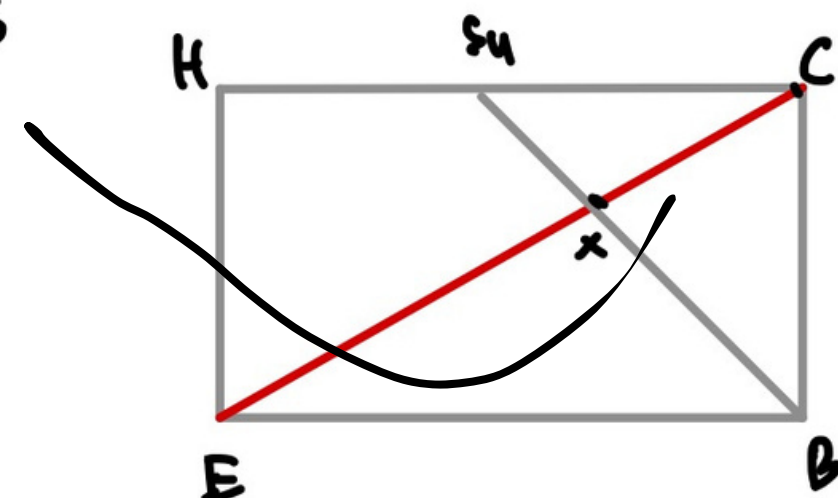
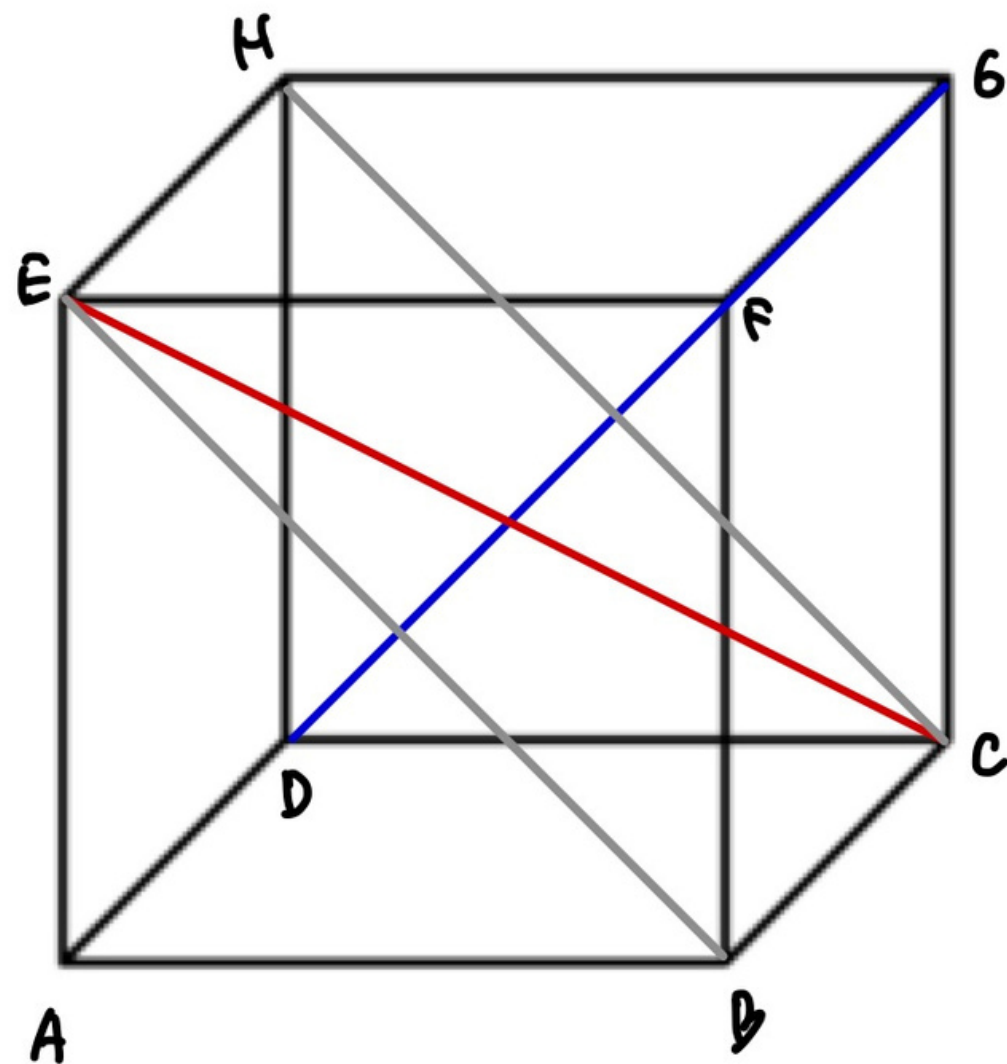
f. Jarak 2 garis bersilangan
 AE ke DF



$$OQ_1 = \frac{1}{2} EG$$

$$= \frac{1}{2} a\sqrt{2}$$

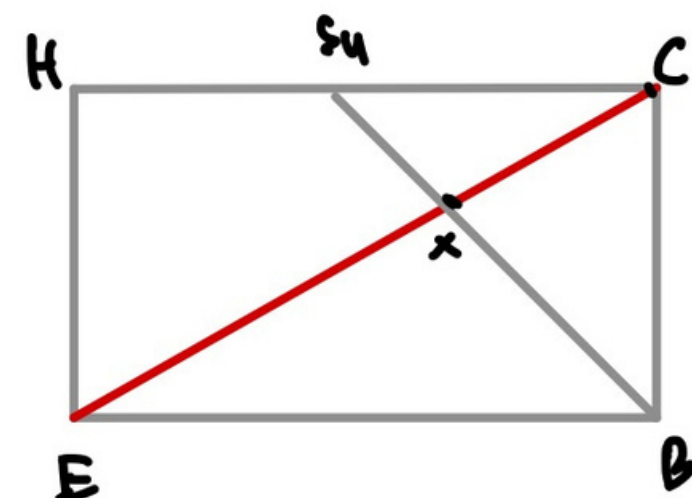
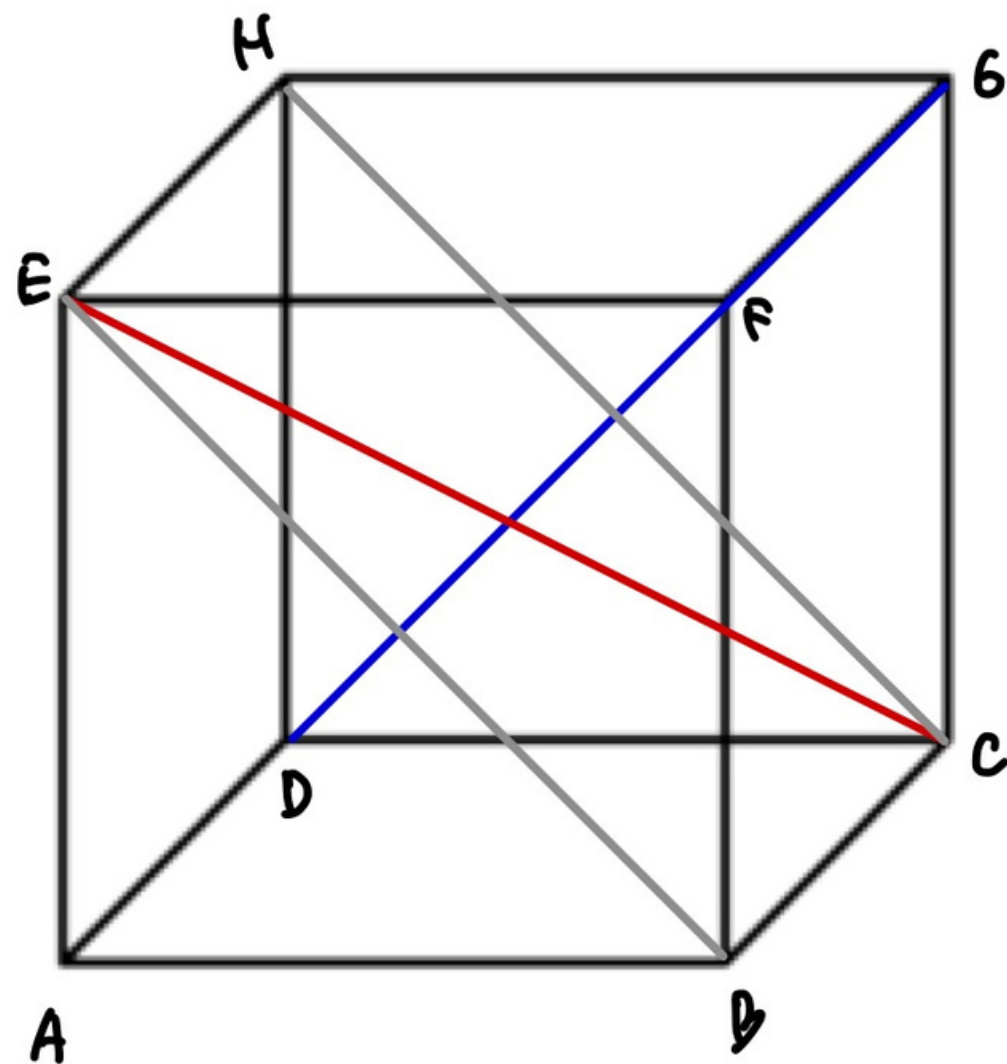
g. Proyeksikan dan cari panjang DG ke EC



$$x = \frac{1}{3} \cdot \frac{1}{2} \cdot a\sqrt{6}$$

$$= \frac{1}{6} a\sqrt{6}$$

h. Proyeksikan dan cari panjang DG ke EC



$$x = \frac{1}{3} \cdot \frac{1}{2} \cdot a\sqrt{6}$$

$$= \frac{1}{6} a\sqrt{6}$$



Great Job!

Teacher Olivia Wilson