

# Tugas Dimensi Tiga

# ANGGOTA XII MIPA 5

Max / 08

Darren E / 11

Stevanie / 34

Tissen / 36

# Ketegaklurusan

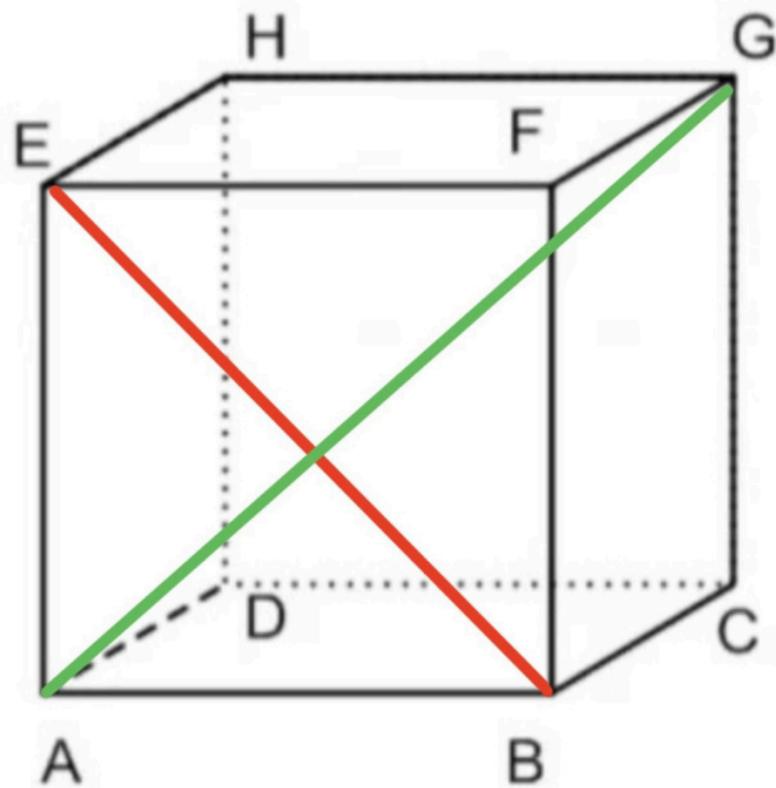
BUKTIKAN  $BE \perp AG$

$BE \perp AD$

$BE \perp AF$ ,

$BE \perp ADGF$ ,

$BE \perp AG$

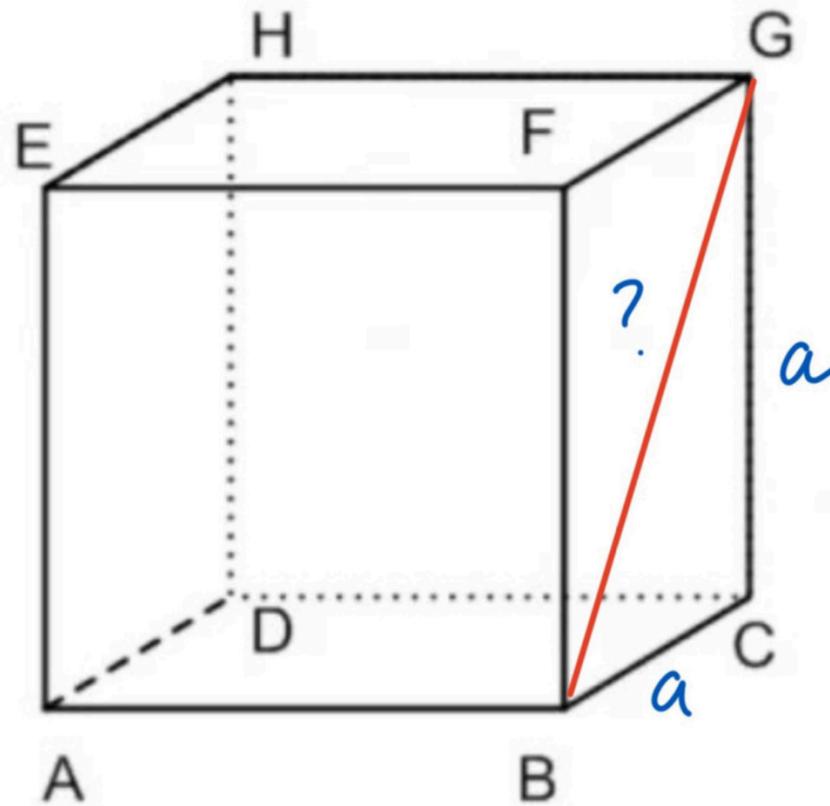


# Jarak Antara 2 Titik

TENTUKAN JARAK TITIK B DAN G

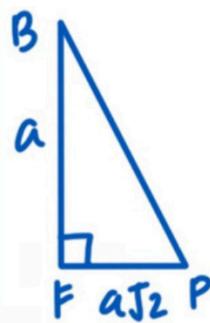
Misal, sisi =  $a$

$$\begin{aligned} BG &= \sqrt{a^2 + a^2} \\ &= \sqrt{2a^2} \\ &= \sqrt{2} a // \end{aligned}$$



# Jarak Antara Titik dan Garis

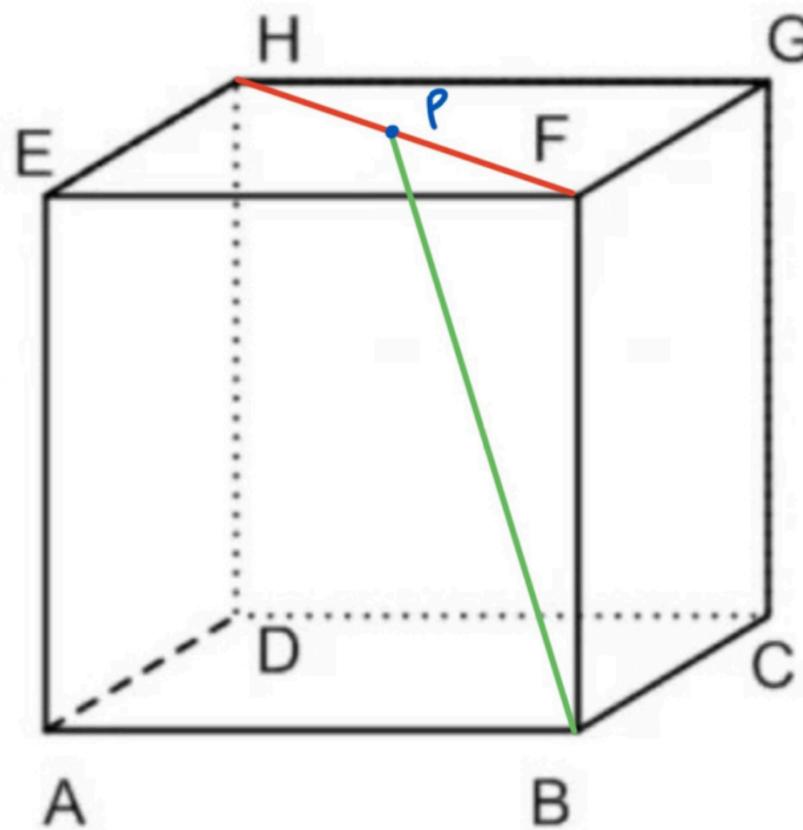
TENTUKAN JARAK TITIK B DAN GARIS FH



diagonal sisi =  $a \cdot \sqrt{2}$

$$FH = a\sqrt{2}$$

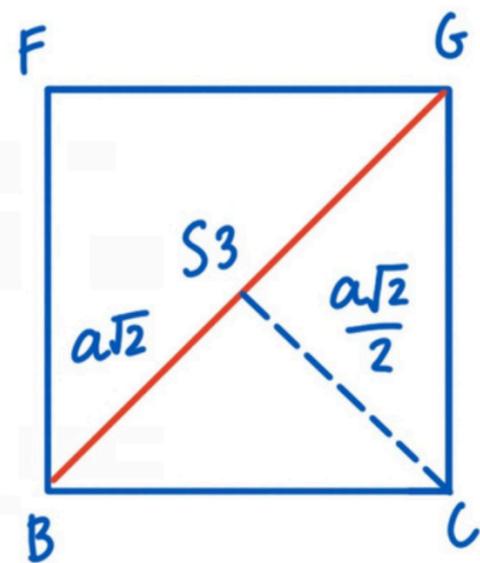
$$FP = \frac{1}{2} \cdot FH \\ = \frac{1}{2} a\sqrt{2}$$



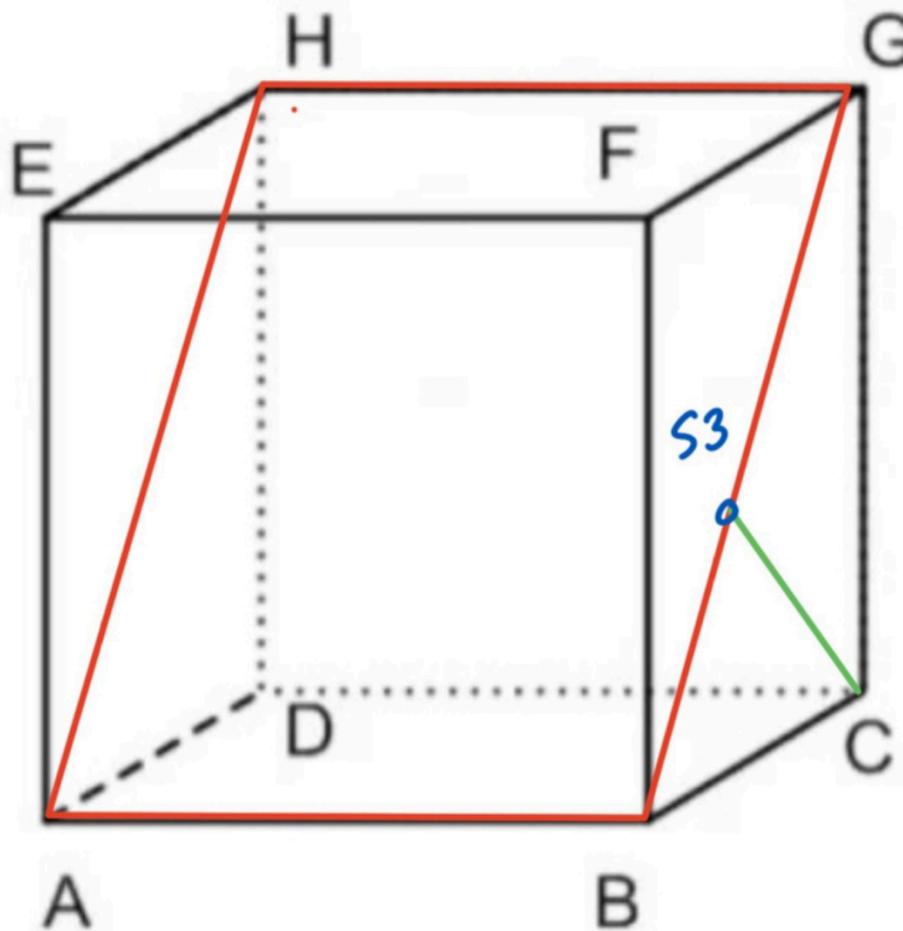
$$BP = \sqrt{a^2 + \left(\frac{a\sqrt{2}}{2}\right)^2} \\ = \sqrt{a^2 + \frac{2a^2}{4}} \\ = \sqrt{\frac{3a}{2}} \\ = \frac{\sqrt{6a}}{2}$$

# Jarak Antara Titik dan Bidang

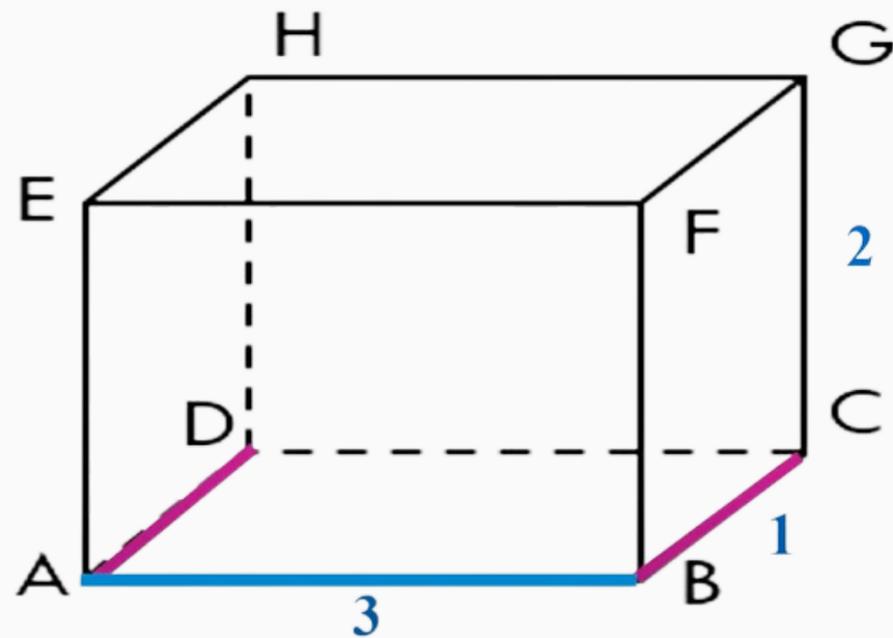
TENTUKAN JARAK TITIK C DAN BIDANG ABGH



$$\begin{aligned}CS_3 &= \frac{1}{2} \cdot BG \\ &= \frac{1}{2} \cdot a\sqrt{2} \\ &= \frac{a\sqrt{2}}{2}\end{aligned}$$

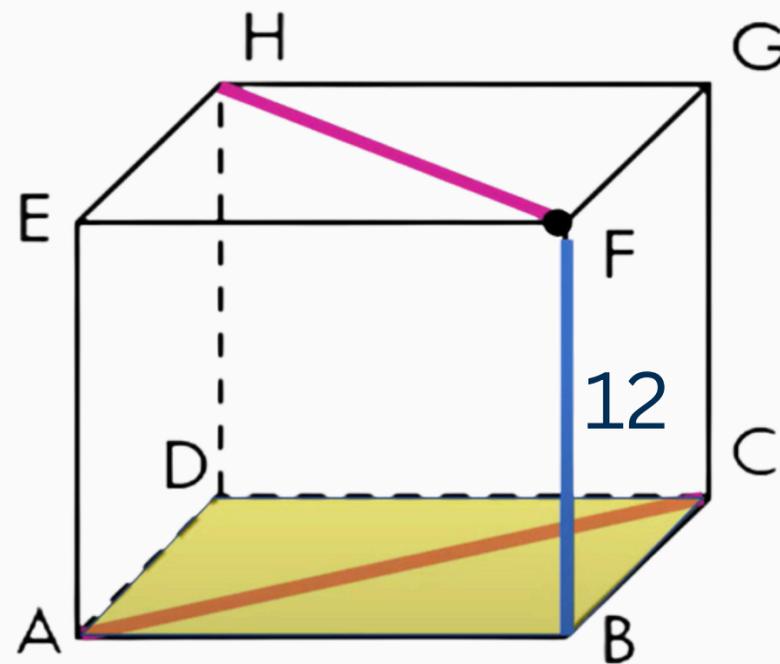


# Jarak Antara 2 Garis Sejajar



AD sejajar dengan BC  
Jarak AD dan BC adalah 3

# Jarak Antara 2 Garis Bersilangan

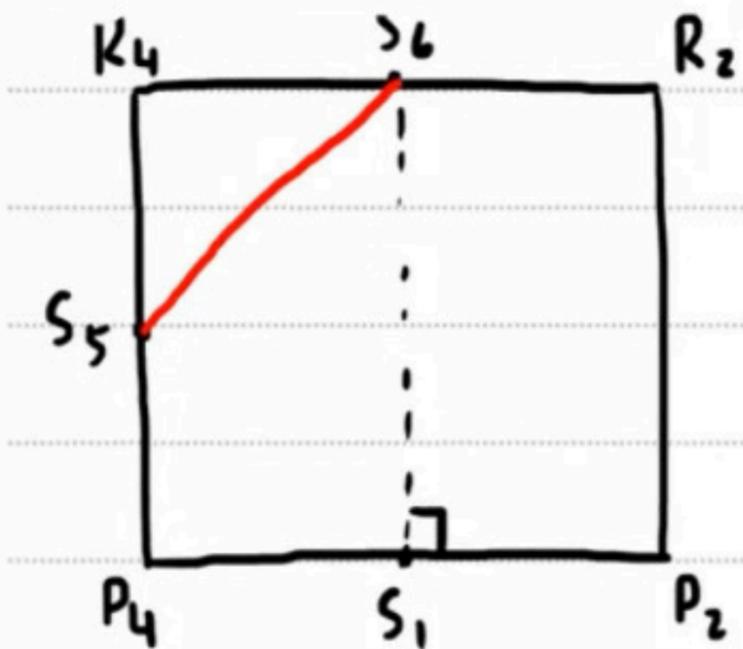
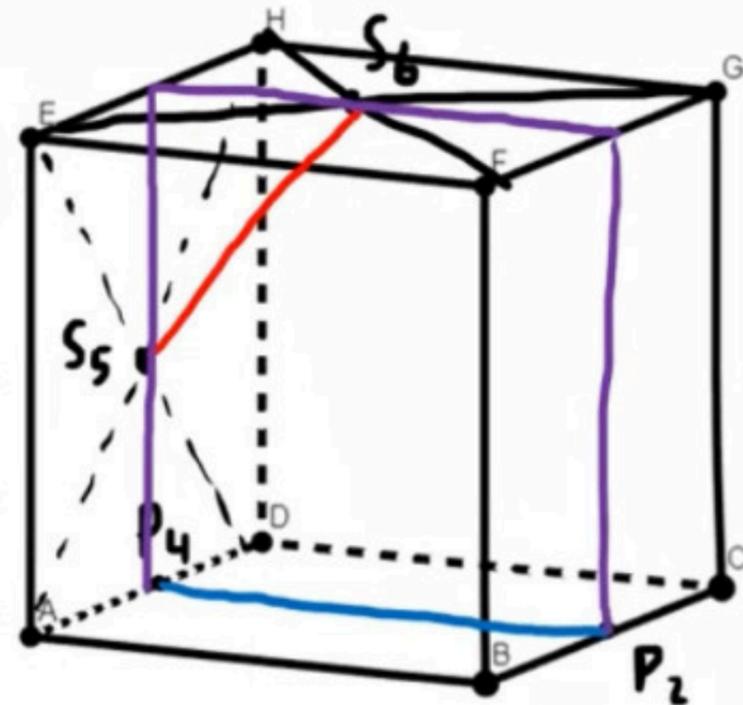


Jarak HF ke AC = Jarak HF ke ABCD  
= Jarak F ke ABCD  
= Jarak F ke AB  
= FB  
= 12

# Proyeksi Garis ke Garis

## Contoh Soal Proyeksi Garis Pada Garis (3)

Pada kubus  $ABCD.EFGH$  dengan panjang rusuk  $a$  di samping, tentukan proyeksi  $S_5S_6$



proyeksi :  $P_4S_1$

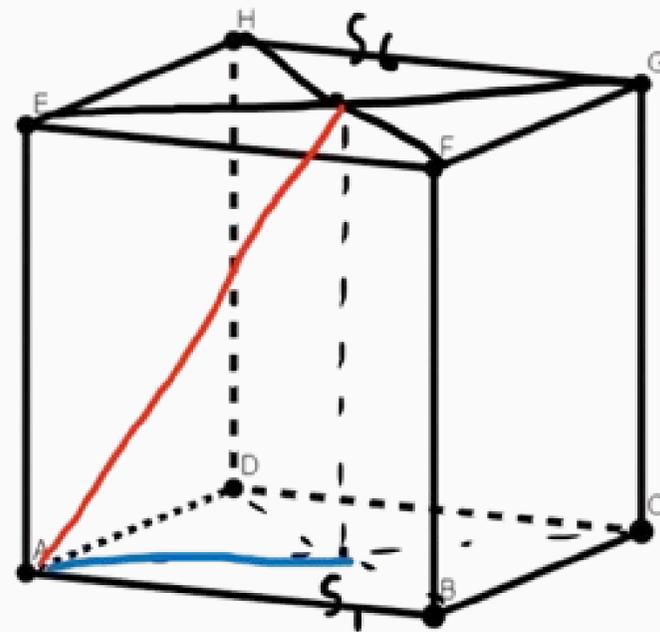
panjang proyeksi =  $\frac{1}{2}a$

# Proyeksi Garis ke Bidang

Pada kubus  $ABCD.EFGH$  dengan panjang rusuk  $a$  di samping, tentukan proyeksi dan hitung panjang proyeksi dari garis  $AS_6$  pada bidang  $ABCD$ .

proyeksi:  $AS_1$

$$\text{panjang proyeksi} = \frac{1}{2} a\sqrt{2}$$





Thank You