



SMA NEGERI 1 BEBANDEM

Kegiatan Belajar 7

Semester Genap



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2021

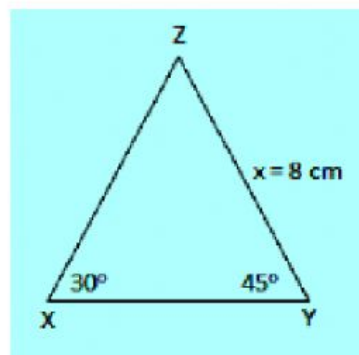
TUGAS INDIVIDU 7

❖ Contoh soal

Jika $\triangle XYZ$ dengan $\angle X = 30^\circ$, $\angle Y = 45^\circ$ dan $x = 8$ cm maka sisi y adalah ...

- A. $4\sqrt{2}$
- B. $4\sqrt{3}$
- C. $8\sqrt{2}$
- D. $8\sqrt{3}$
- E. $16\sqrt{3}$

Penyelesaian soal / pembahasan



Contoh soal aturan sinus

Berdasarkan aturan sinus diperoleh:

$$\begin{aligned}\rightarrow \frac{x}{\sin X} &= \frac{y}{\sin Y} \\ \rightarrow \frac{8 \text{ cm}}{\sin 30^\circ} &= \frac{y}{\sin 45^\circ} \\ \rightarrow y &= \frac{8 \text{ cm} \cdot \sin 45^\circ}{\sin 30^\circ} \\ \rightarrow y &= \frac{8 \text{ cm} \cdot \frac{1}{2}\sqrt{2}}{\frac{1}{2}} = 8\sqrt{2} \text{ cm}\end{aligned}$$

Soal ini jawabannya C.

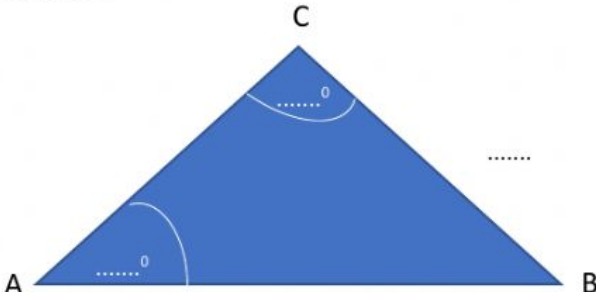
❖ Latihan soal

1. Diketahui segitiga ABC dengan $\angle A = 30^\circ$, $BC = 16 \text{ cm}$, $\angle C = 120^\circ$.

Tentukanlah

- Panjang AB
- Besar *Sudut B*
- Panjang AC

A. Penyelesaian Soal

No	Penyelesaian
1	Diketahui :  Ditanyakan $AB = \dots?$ $\angle B = \dots?$ $AC = \dots?$
	Jawab Berdasarkan aturan sinus diperoleh $\frac{\dots}{\sin 120^\circ} = \frac{\dots}{\dots}$

$$\frac{\dots\dots\dots}{\dots\sqrt{\dots\dots\dots}} = \frac{\dots\dots\dots}{\dots\dots\dots}$$

$$AB = \dots\dots\dots\sqrt{\dots\dots\dots}$$

b. $\angle A + \angle B + \angle C = 180^\circ$

$$\dots\dots\dots^\circ + \angle B + \dots\dots\dots^\circ = 180^\circ$$

$$\angle B = \dots\dots\dots^\circ$$

c. Berdasarkan aturan sinus diperoleh

$$\frac{\dots\dots\dots}{\sin 30^\circ} = \frac{\dots\dots\dots}{\dots\dots\dots}$$

$$\frac{\dots\dots\dots}{\dots\dots\dots} = \frac{\dots\dots\dots}{\dots\dots\dots}$$

$$AC = \dots\dots\dots$$