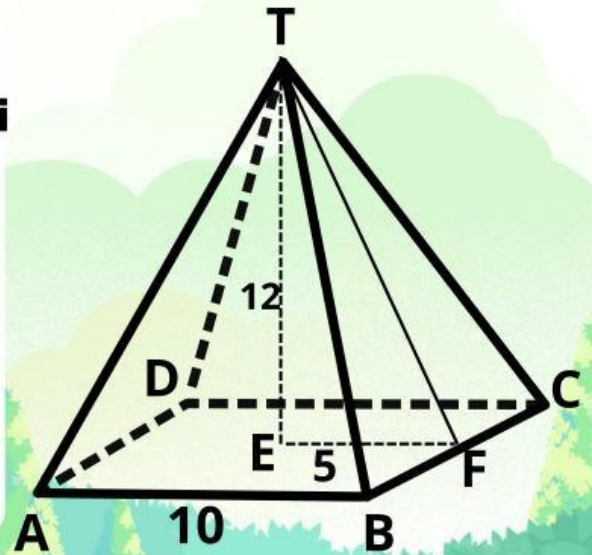


LATIHAN

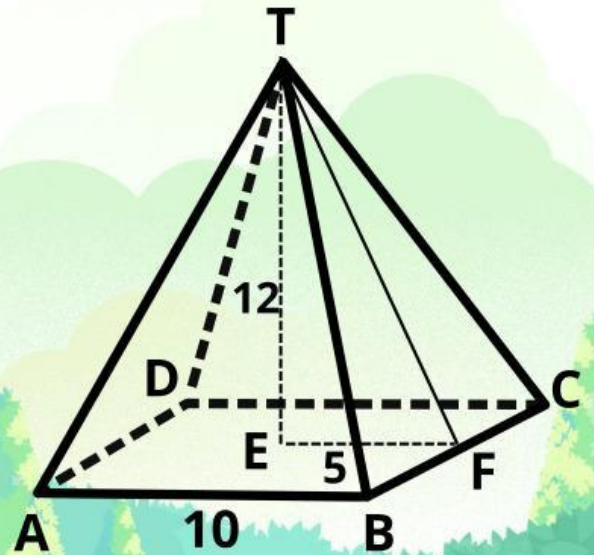
Alas sebuah limas berbentuk persegi dengan panjang sisinya 10 cm. Jika tinggi limas 12 cm, tentukan:

- a. luas alas
- b. tinggi segitiga pada sisi tegak
- c. luas sisi tegak
- d. luas permukaan limas
- e. volume limas



PENYELESAIAN

a. luas alas
= $AB \times BC$
= $\times$
= cm^2



PENYELESAIAN

b. tinggi segitiga pada sisi tegak

$$TF^2 = TE^2 + EF^2$$

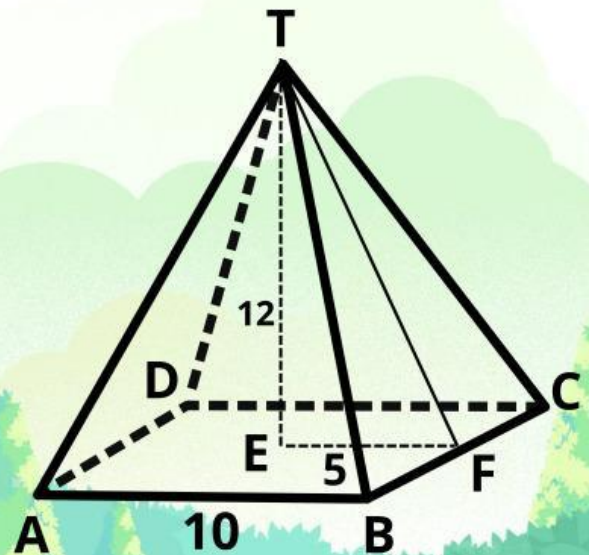
$$TF^2 = 8^2 + 6^2$$

$$TF^2 = 64 + 36$$

$$TF^2 = 100$$

$$TF = \sqrt[2]{100}$$

$$TF = 10 \text{ cm}$$



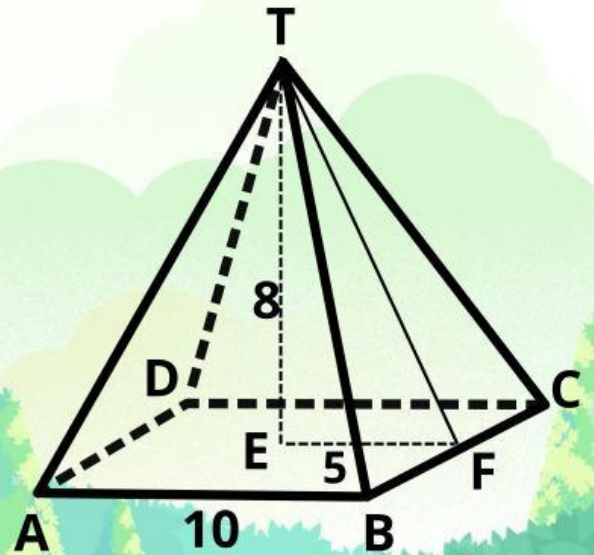
PENYELESAIAN

c. luas sisi tegak

$$L.TBC = \frac{1}{2} \times BC \times TF$$

$$L.TBC = \frac{1}{2} \times 12 \times 10$$

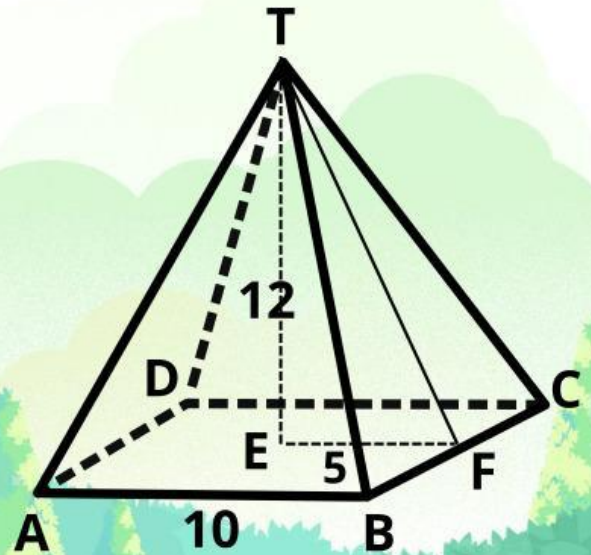
$$L.TBC = 60 \text{ cm}^2$$



PENYELESAIAN

d. luas permukaan limas

$$\begin{aligned} &= \text{L.alas} + \text{Jumlah L.sisi tegak} \\ &= 144 + 4 \times 60 \\ &= 144 + 240 \\ &= 384 \text{ cm}^2 \end{aligned}$$



PENYELESAIAN

e. volume limas

$$\begin{aligned} &= \frac{1}{3} \times L.alas \times t \\ &= \frac{1}{3} \times 144 \times 8 \\ &= \mathbf{48 \times 8} \\ &= \mathbf{384 \text{ cm}^3} \end{aligned}$$

