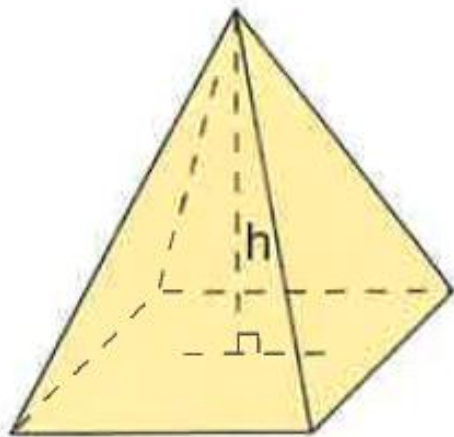
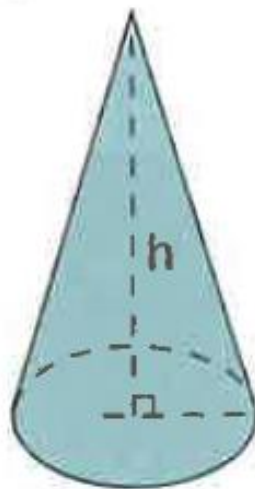


Kartion tilavuus

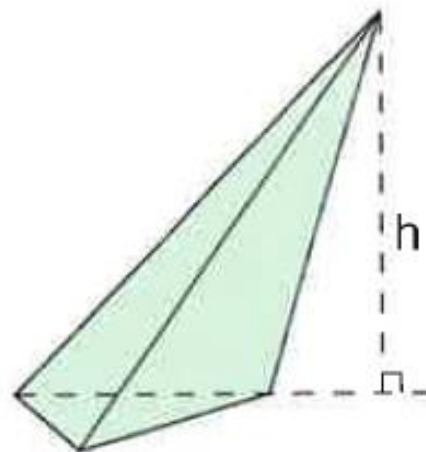
Erilaisia kartioita



pyramidi

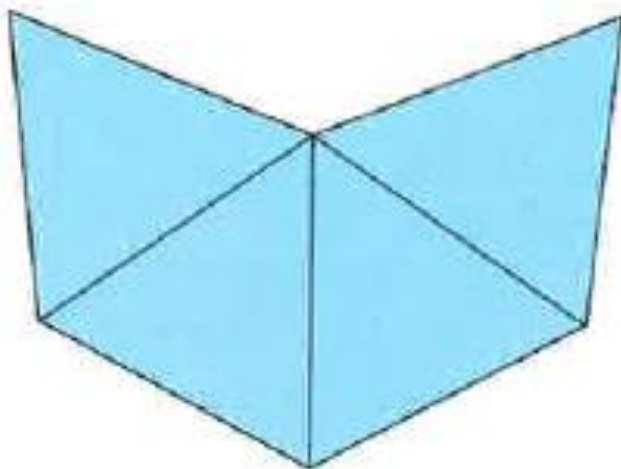
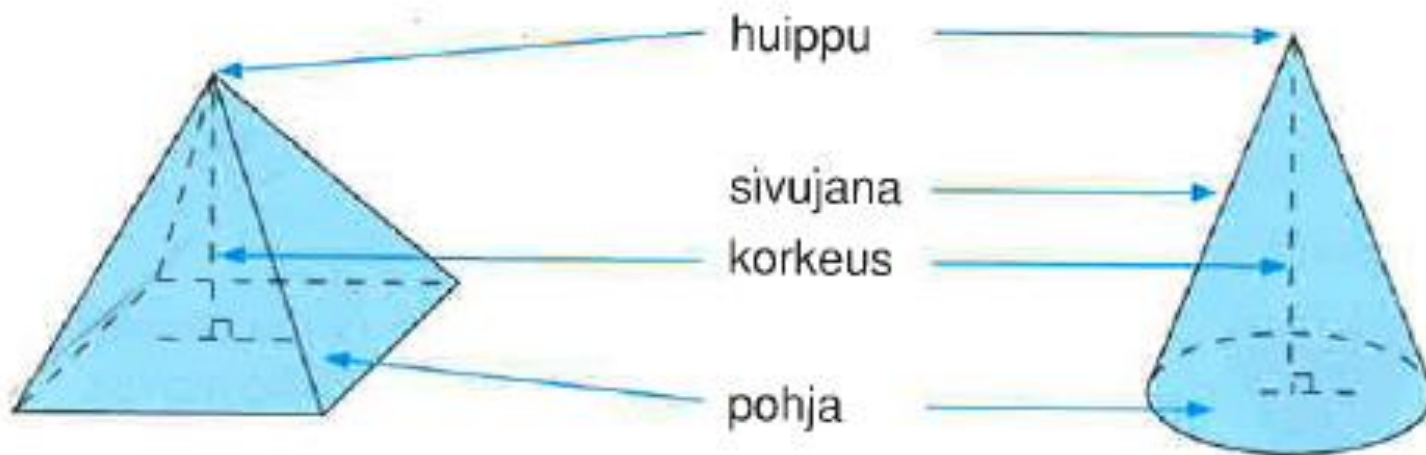


ympyräkartio

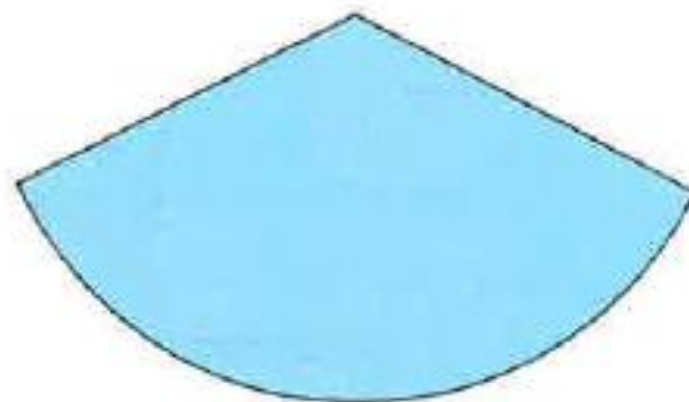


vino kartio

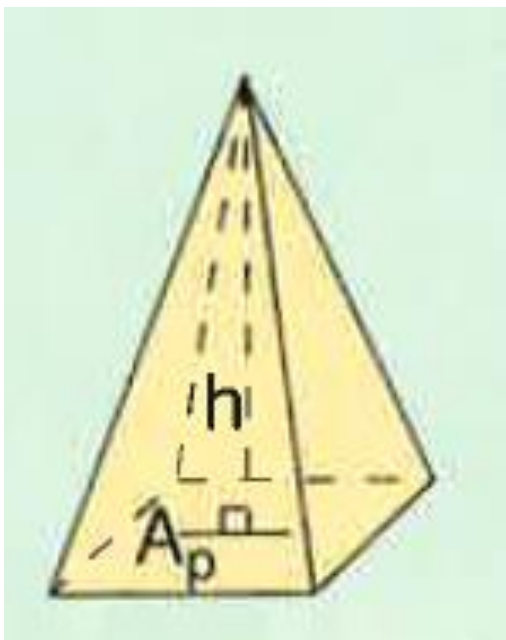
KARTION OSAT



vaippa



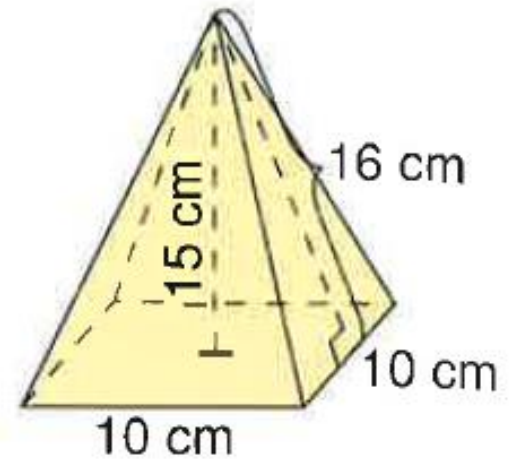
Kartion tilavuus



$$V = \frac{\text{pohjan pinta} - \text{ala} \cdot \text{korkeus}}{3}$$
$$= \frac{A_p \cdot h}{3}$$

Esim. Laske pyramidin tilavuus.

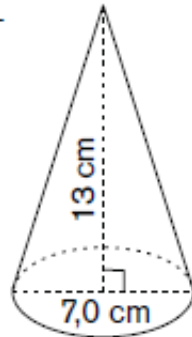
$$\begin{aligned} V &= \frac{\text{pohjan pinta} - \text{ala} \cdot \text{korkeus}}{3} \\ &= \frac{10\text{cm} \cdot 10\text{cm} \cdot 15\text{cm}}{3} \\ &= 500\text{cm}^3 \end{aligned}$$



Teht. TK s.22, LT9 s.41 157 a), 159 a), 160 =>

Kotitehtävät

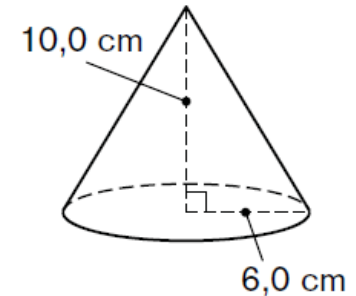
164. Reetta valaa suoran ympyräkartion muotoisia kynttilöitä. Hänellä on sulaa vahaa 1,2 litraa. Kuinka monta 13 cm korkeaa ja 7,0 cm leveää kynttilää Reetta voi vahasta tehdä?



82. Laske suoran ympyräkartion

- a) pohjan pinta-ala

$$A = \pi \cdot (6,0 \text{ cm})^2 \\ \approx 113,1 \text{ cm}^2$$



- b) tilavuus.

$$V = \frac{113,1 \text{ cm}^2 \cdot 10,0 \text{ cm}}{3} \\ = 377,0 \text{ cm}^3$$

$$\text{tai } V = \frac{\pi \cdot (6,0 \text{ cm})^2 \cdot 10,0 \text{ cm}}{3} \\ \approx 377,0 \text{ cm}^3$$

$$1,2 \text{ dm}^3 : \left(\frac{\pi \cdot (0,35 \text{ dm})^2 \cdot 1,3 \text{ dm}}{3} \right) \approx 7$$