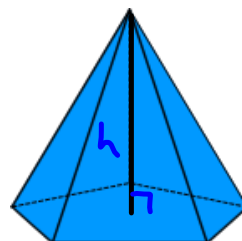
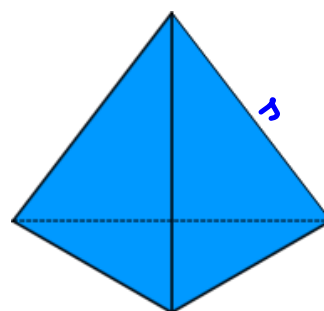
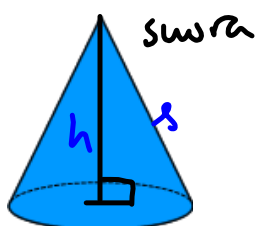


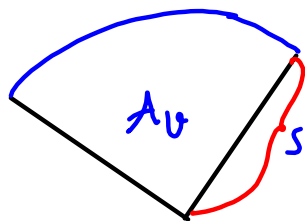
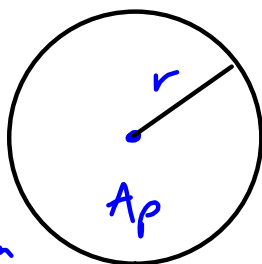
KARTIO

- pinta A_p
- sivupinta s
- korkeus h
- pyramidi
- ympyräkartioiden } suuria/ainoja
- akseli

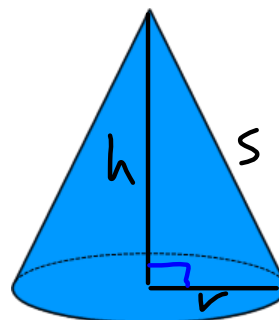
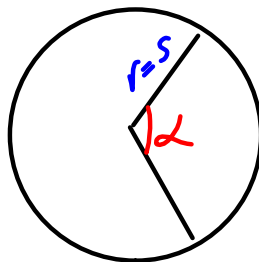


$$A = A_p + A_u$$

$$= \bar{u}r^2 + \bar{u}rs$$



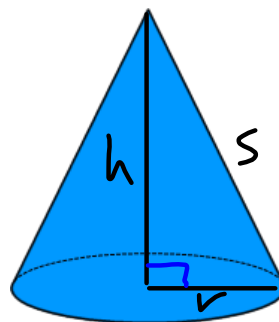
Π tyyppi $A_u = \frac{\alpha}{360^\circ} \cdot \bar{u}s^2$



$$V = \frac{1}{3} \cdot A_p \cdot h$$

esim Suoran ympyräkattion pinta-ala on 32 m^2 . Sen sivujanon pituus on $5,0 \text{ m}$.
Laske pohjaympyrän säde. (Katto)

Ratk. $s = 5,0 \text{ m}$
 $r = ?$
 $A = 32 \text{ m}^2$



$$A = A_u = \bar{u}rs$$

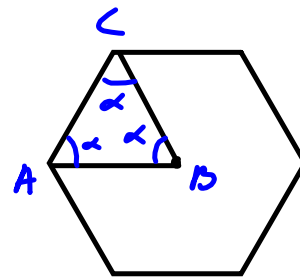
$$32 = \bar{u} \cdot r \cdot 5 \quad | :5\bar{u}$$

$$r = \frac{32}{5\bar{u}} \approx 2,037 \approx 2,0$$

V: Säde on $2,0 \text{ m}$.

esim Säännöllisen kuruksionisen pyramidin korkeus on 8 ja pohjan suurin täristäjä on 10.
 laske pyramidin

- a) tilavuus
 b) sivupinnan ala

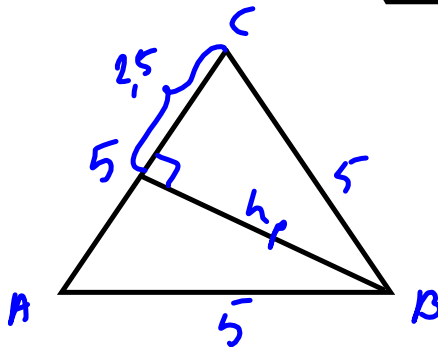


$$h_p = ?$$

$$h^2 + 2,5^2 = 5^2$$

$$\vdots$$

$$h = \sqrt{25 - 2,5^2}$$



$$A_p = 6 \cdot A_k = \frac{3}{6} \cdot \frac{5 \cdot 2,5\sqrt{3}}{2} = 37,5\sqrt{3}$$

$$h = 8$$

$$\underline{V} = \frac{A_p \cdot h}{3} = \frac{37,5\sqrt{3} \cdot 8}{3} = \underline{100\sqrt{3}}$$