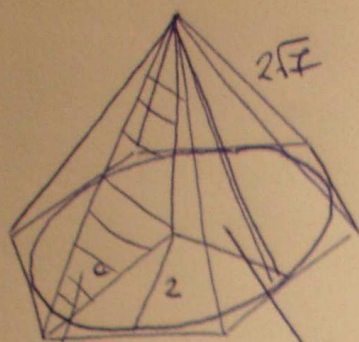
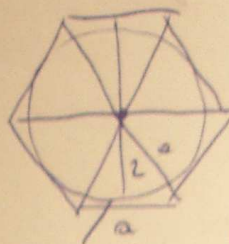


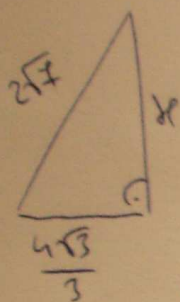
ZAD 8



PODSTAWA



PROWIEC OKRĘGU
WPIRANEGO W SIECĆ KÓŁ
JEST RÓWNY WYSOKOŚCI
TRÓJKĄTA RÓWNOBOCZNEGO
PODAJĄCEGO $\frac{1}{6}$ CIĘCIĄ
PODSTAWY

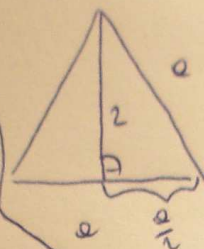


$$h^2 = (2\sqrt{7})^2 - \left(\frac{4\sqrt{3}}{3}\right)^2$$

$$h^2 = 28 - \frac{48}{9}$$

$$h^2 = \frac{252 - 48}{9}$$

$$h = \sqrt{\frac{204}{9}} = \frac{2\sqrt{51}}{3}$$



z TH. PITAGORASA

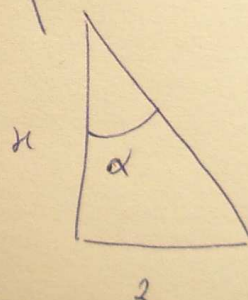
$$2^2 = \left(\frac{2}{3}\right)^2 + \left(\frac{2\sqrt{3}}{3}\right)^2$$

$$2^2 = \frac{4}{9} + \frac{12}{9}$$

$$4 = \frac{4}{9} + \frac{12}{9}$$

$$4 = \frac{16}{9}$$

$$4 = \sqrt{\frac{16}{9}} = \frac{4}{3} \cdot \frac{\sqrt{3}}{\sqrt{3}} = \frac{4\sqrt{3}}{3}$$



$$\sin \alpha = \frac{2}{h} = \frac{2}{\frac{2\sqrt{51}}{3}} = \frac{6}{2\sqrt{51}} = \frac{3}{\sqrt{51}}$$

$$= \frac{\sqrt{3\sqrt{51}}}{\sqrt{51}} = \frac{\sqrt{151}}{17}$$