

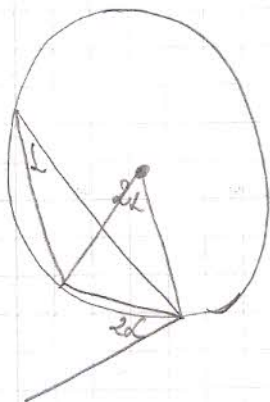
Vingőre

lemonadt · feladaton + elméleti
minden

1.) Látkör szerkesztés : 113-115 old.

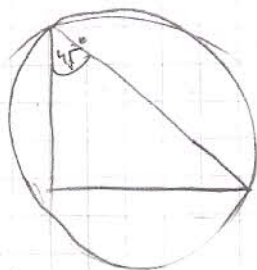
- terület (velg telu)

- középponti szög (csak 1ra)
kétele



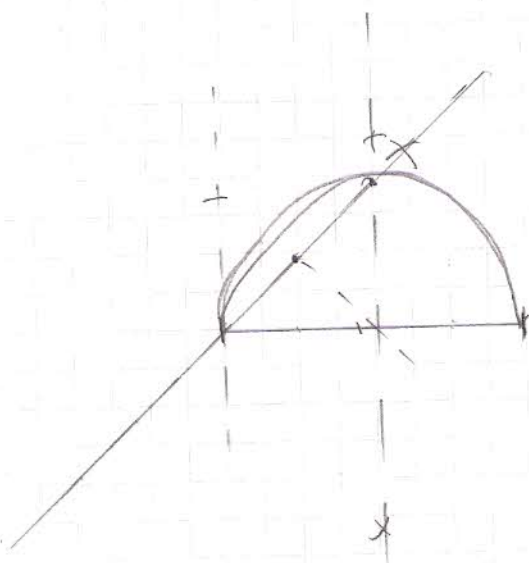
- felvesszük a nagyság

- 45° szög számukra



- merőleges a magára

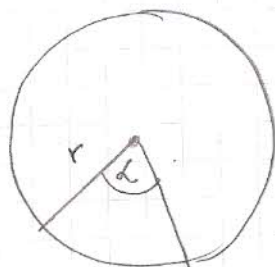
- szöghöz felelő merőleges



2) kör kerület : kerület $k = 2r\pi$
 terület : $t = r^2\pi$



körív hossza



his h rad $\rightarrow i = l \cdot r$

180°

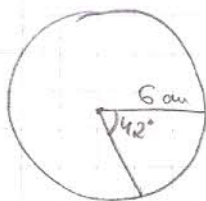
π rad

1°

$\frac{\pi}{180}$ rad $\approx 0,017$ rad

$\frac{180^\circ}{\pi} \approx 57,3^\circ$ 1 rad

~ körív



$$l = ?$$

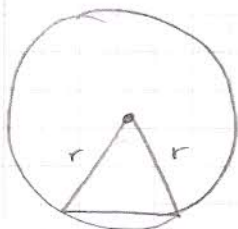
szögahéba átváltani

$$1^\circ = \frac{\pi}{180}$$

$$42^\circ = \frac{\pi}{180} \cdot 42 = 0,73 \text{ rad}$$

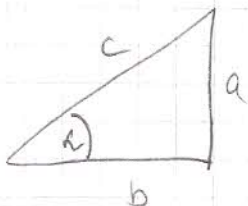
$$l = L \cdot r = 0,73 \cdot 6 = \underline{\underline{4,38 \text{ cm}}}$$

~ köríkek területé



$$L_k = \frac{l \cdot r}{2}$$

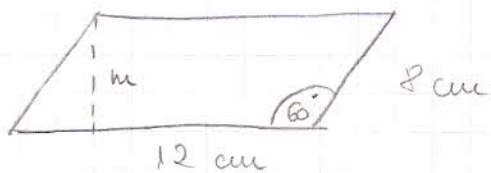
3.) szög függvény



$$\sin L = \frac{a}{c} < 1 \quad \cos L = \frac{b}{c} < 1$$

$$\tan L = \frac{a}{b}$$

$$\cot L = \frac{b}{a}$$



$$t = 2$$

parallelogramus : $t = \frac{m}{a}$

$$\sin 60^\circ = \frac{m}{8} \quad 1 \cdot 8$$

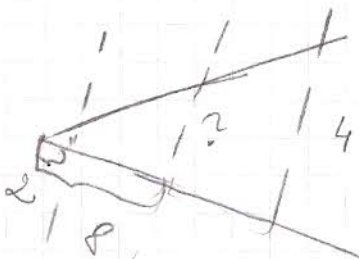
$$8 \sin 60^\circ = m$$

$$8 \cdot \frac{\sqrt{3}}{2} = m$$

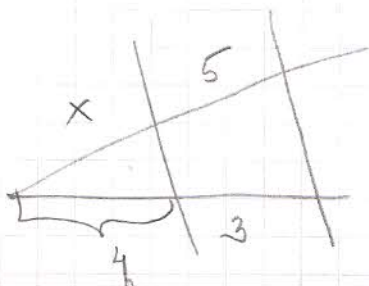
$$4\sqrt{3} = m$$

$$t = a \cdot m = 12 \cdot 4 \cdot \sqrt{3} \text{ cm}^2$$

4.) Párhuzamos-szelők tétele

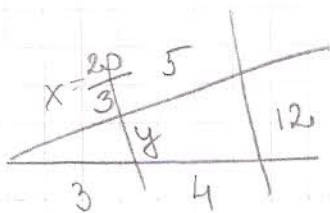


$$\frac{2}{8} = \frac{x}{4} = \frac{1}{4}$$



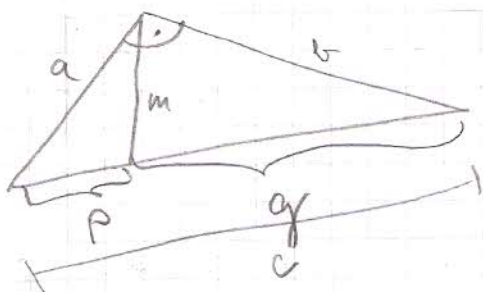
$$\frac{x}{5} = \frac{4}{3}$$

$$x = \frac{20}{3}$$



$$\frac{4}{7} = \frac{4}{12}$$

5) Átlagossági tétel a háromszögben



$$m = \sqrt{p \cdot q}$$

$$m^2 = p \cdot q$$

magassági tétel

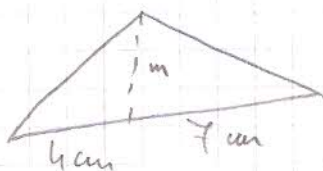
oldalsó tétel:

$$a = \sqrt{c \cdot p}$$

$$a^2 = c \cdot p$$

$$b = \sqrt{c \cdot q}$$

$$b^2 = c \cdot q$$



$$m = ?$$

$$t = ?$$

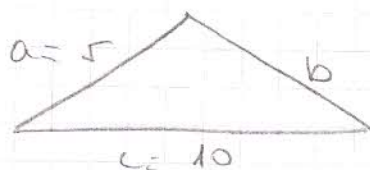
$$t = \frac{a \cdot m}{2}$$

$$m^2 = 4 \cdot 7 = 28$$

$$m = \sqrt{28}$$

$$t = \frac{11 \cdot \sqrt{28}}{2} =$$

cm^2



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

$$a = 5 \text{ cm}$$

$$m = ?$$

$$\text{pit: } c^2 - a^2 = b^2 \Rightarrow b$$

$$\text{vaag} \rightarrow a^2 = c \cdot p \Rightarrow p$$

$$m^2 = p \cdot q$$

6.) määrdeliski eqvendet

$$a) -2(x+2)(x-4) = 0 \quad | \cdot (-2)$$

$$(x+2)(x-4) = 0$$

$$x_1 = -2 \quad x_2 = 4$$

$$b) 2x^2 = 8 + 8x$$

$$2x^2 - 8x + 8 = 0$$

$$x_{1,2} = \frac{8 \pm \sqrt{64 - 64}}{4}$$

$$x_{1,2} = \frac{8}{4} = 2$$

0-ra teokuholi

$$x_{1,2} = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

7) Nevező gyöktelenítése

$$\frac{14}{\sqrt{2}-3} \quad / \cdot \sqrt{2}+3$$

$$\frac{14}{\sqrt{2}-3} = \frac{\sqrt{2}+3 \cdot 14}{\sqrt{2}+3 \cdot \sqrt{2}-3} = \frac{14 \cdot \sqrt{2} + 3}{(\sqrt{2})^2 - 3^2} = \frac{14\sqrt{2} + 42}{2-9}$$

$$= \frac{14\sqrt{2} + 42}{-7}$$

8) Kifejezés értéke

$$\begin{aligned} \sqrt[4]{3} \cdot 6\sqrt{3^5} &= \sqrt[12]{3^3} \cdot \sqrt[12]{3^{10}} = \sqrt[12]{3^{13}} = \\ &= \sqrt[12]{3^{12} \cdot 3} = 3 \cdot \sqrt{3} \end{aligned}$$

- függvény táblázat
- számológép (nem okos telefon)
- hőtér
- vialis