

S.216

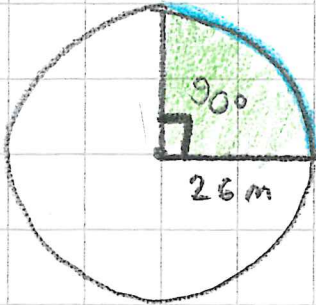
997

$$\text{Kaaren pituus } b = \frac{\alpha}{360^\circ} \cdot 2\pi r$$

Sektorin pinta-ala

$$A = \frac{\alpha}{360^\circ} \cdot \pi r^2$$

$$\pi \approx 3,14$$



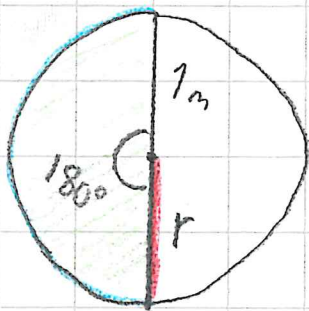
$$a) \alpha = 90^\circ \quad r = 26 \text{ m}$$

$$b = \frac{90^\circ}{360^\circ} \cdot 2 \cdot 3,14 \cdot 26 \text{ m}$$

$$= 40,82 \text{ m} \approx \underline{41 \text{ m}}$$

$$A = \frac{90^\circ}{360^\circ} \cdot 3,14 \cdot (26 \text{ m})^2$$

$$= 530,66 \text{ m}^2 \approx \underline{531 \text{ m}^2}$$



$$b) \alpha = 180^\circ \quad d = 1 \text{ m}$$

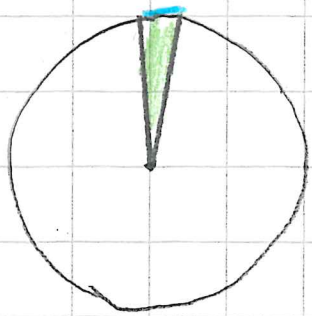
$$r = \frac{1 \text{ m}}{2} = 0,5 \text{ m}$$

$$b = \frac{180^\circ}{360^\circ} \cdot 2 \cdot 3,14 \cdot 0,5 \text{ m}$$

$$= 1,57 \text{ m} \approx \underline{1,6 \text{ m}}$$

$$A = \frac{180^\circ}{360^\circ} \cdot 3,14 \cdot (0,5 \text{ m})^2$$

$$= 0,3925 \text{ m}^2 \approx \underline{0,4 \text{ m}^2}$$



c)  $\alpha = 5^\circ$   $r = 0,28 \text{ mm}$

~~l~~  $b = \frac{5^\circ}{360^\circ} \cdot 2 \cdot 3,14 \cdot 0,28 \text{ mm}$

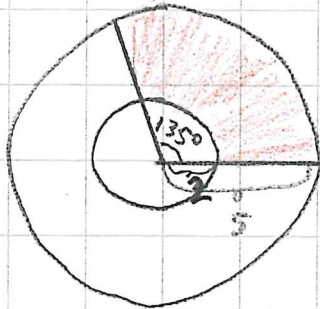
$= 0,0244... \text{ mm} \approx \underline{0,024 \text{ mm}}$



$A = \frac{5^\circ}{360^\circ} \cdot 3,14 \cdot (0,28 \text{ mm})^2$

$= 0,00341... \approx \underline{0,0034 \text{ mm}^2}$

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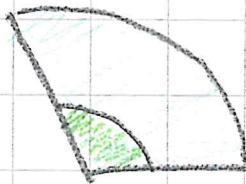
iso  $d = 10 \text{ cm}$

pieni  $d = 4 \text{ cm}$

iso  $r = \frac{10 \text{ cm}}{2} = 5 \text{ cm}$

pieni  $r = \frac{4 \text{ cm}}{2} = 2 \text{ cm}$

$\alpha = 135^\circ$



$A = \frac{135^\circ}{360^\circ} \cdot 3,14 \cdot (5 \text{ cm})^2 - \frac{135^\circ}{360^\circ} \cdot 3,14 \cdot (2 \text{ cm})^2$

$= 29,4375 \text{ cm}^2 - 4,71 \text{ cm}^2$

$= 24,7275 \text{ cm}^2$

$\approx 25 \text{ cm}^2$