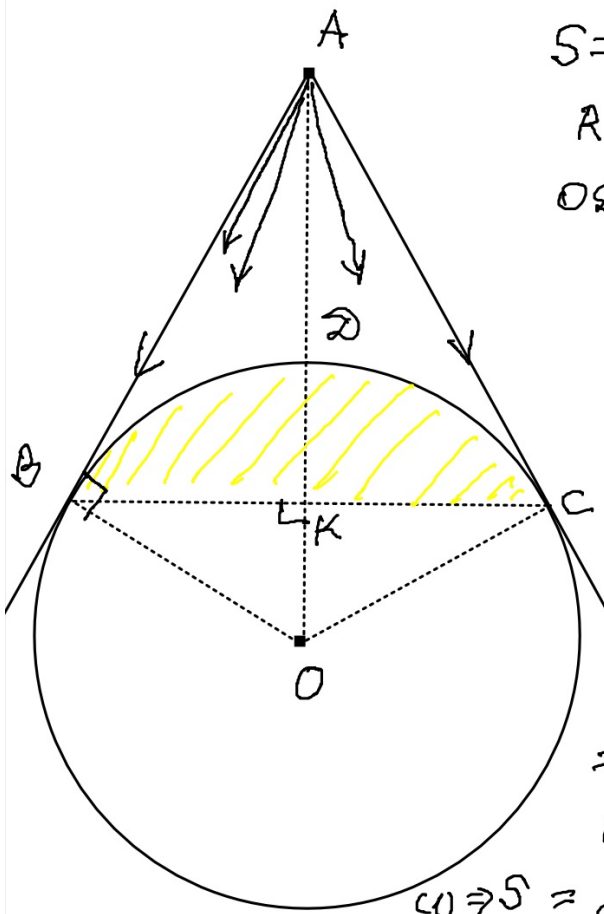




$$S = 2\pi RH \quad (1)$$

$$R = OB = 67 \text{ cm} \quad H = KD$$

$$OD = AD = 67 \text{ cm}$$

$$KD = OD - OK \quad (2)$$

$$AD = 2 \cdot OD = 2R$$

$\triangle ABO$  — прямоугольный

$$\Rightarrow \cos \angle BOA = BO / AO = \frac{R}{2R} = \frac{1}{2}$$

$$\Rightarrow \angle BOA = 60^\circ \Rightarrow \angle BAO = 30^\circ$$

$\triangle BKO$  — прямоугольный

$$\Rightarrow OK = OB \cdot \cos \angle BOA = OB \cdot \cos \angle BAO =$$

$$= \frac{R}{2} = \frac{67}{2} \text{ cm} \Rightarrow \text{из (2)}$$

$$KD = 67 - \frac{67}{2} = \frac{67}{2} = 33,5 \text{ cm}$$

$$\text{из (1)} \Rightarrow S = \frac{2\pi \cdot 67 \cdot 67}{2} = 67^2 \cdot \pi = 4489\pi \text{ cm}^2$$