

$$a^2 = b^2 + c^2 - 2bc \cos \alpha$$

$$b^2 = a^2 + c^2 - 2ac \cos \beta$$

$$c^2 = a^2 + b^2 - 2ab \cos \gamma$$

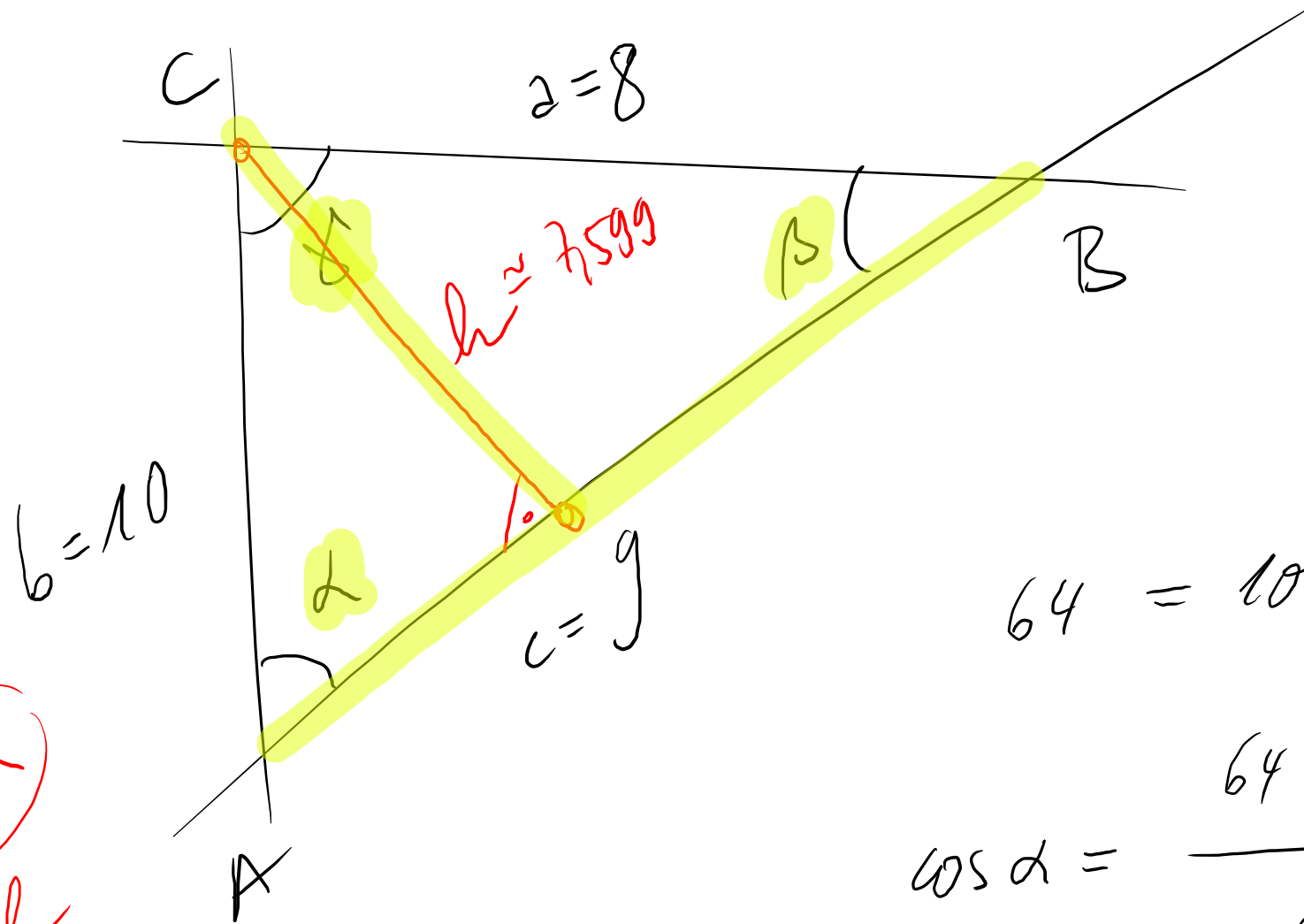
$$A = \frac{1}{2} bc \sin \alpha$$

$$= \frac{1}{2} ab \sin \gamma = \frac{1}{2} ac \sin \beta$$

$$\frac{\sin \alpha}{a} = \frac{\sin \beta}{b} = \frac{\sin \gamma}{c}$$

$$\frac{a}{\sin \alpha} = \frac{b}{\sin \beta} = \frac{c}{\sin \gamma}$$

Résoudre



A = ?

$$64 = 100 + 81 - 2 \cdot 10 \cdot 9 \cdot \cos \alpha$$

$$\cos \alpha = \frac{64 - 181}{-180}$$

$$\alpha \approx 49,458398$$

$\frac{1}{2} \cdot a \cdot b \cdot \sin \alpha$   
h

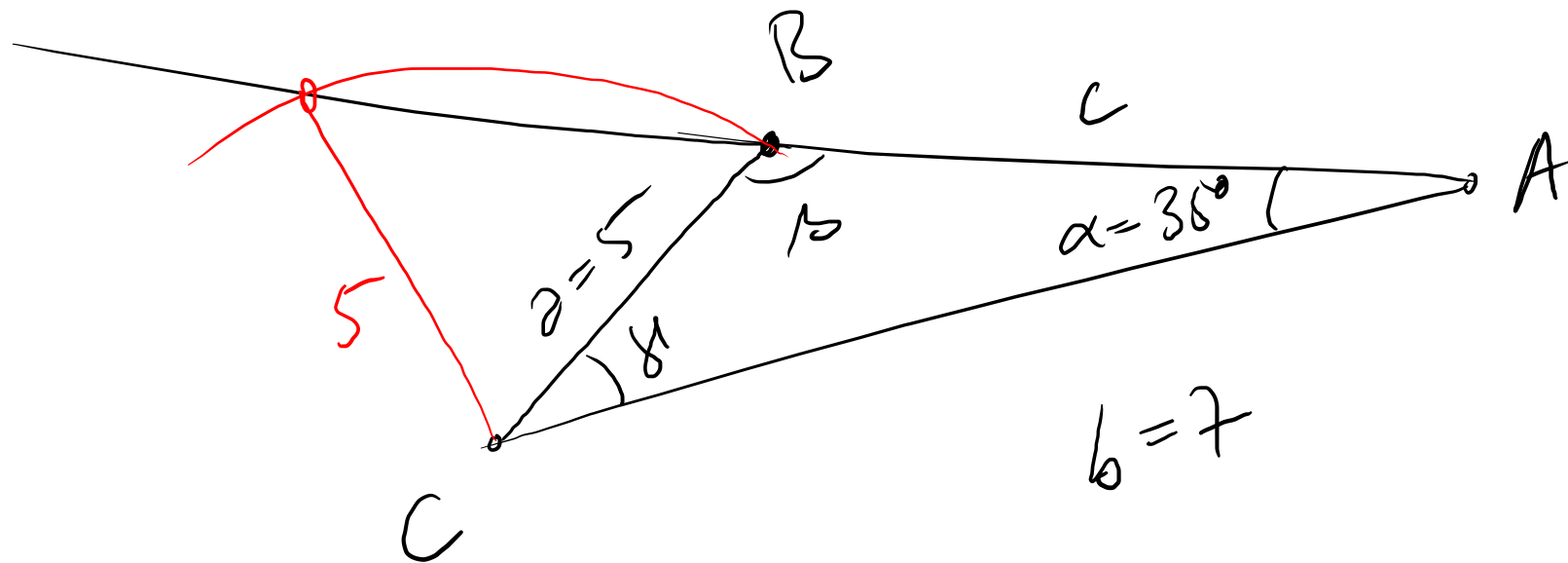
$$\sin \alpha = \frac{h}{10}$$
$$\Rightarrow h = 10 \sin \alpha \approx 7,6$$

$$a = 5$$

$$b = 7$$

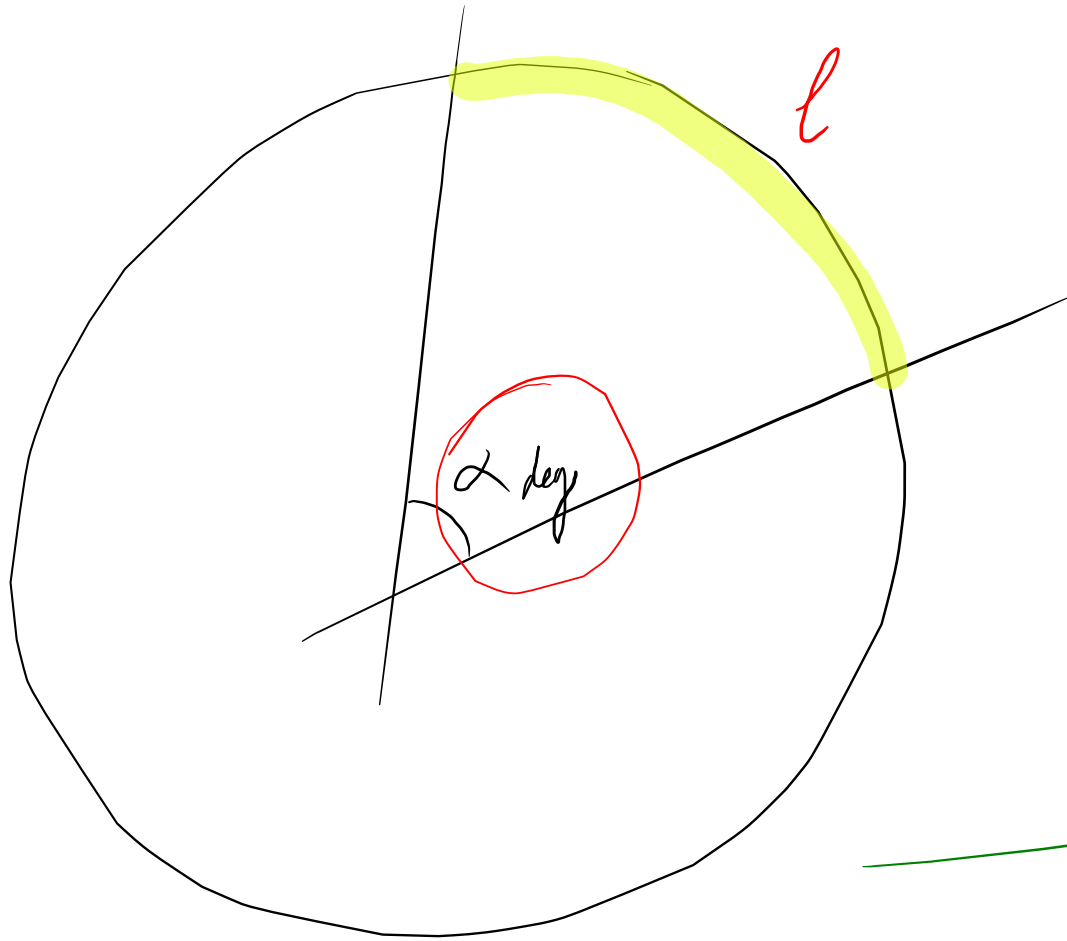
$$\alpha = 35^\circ$$

$$a^2 = b^2 + c^2 - 2bc \cos \alpha$$

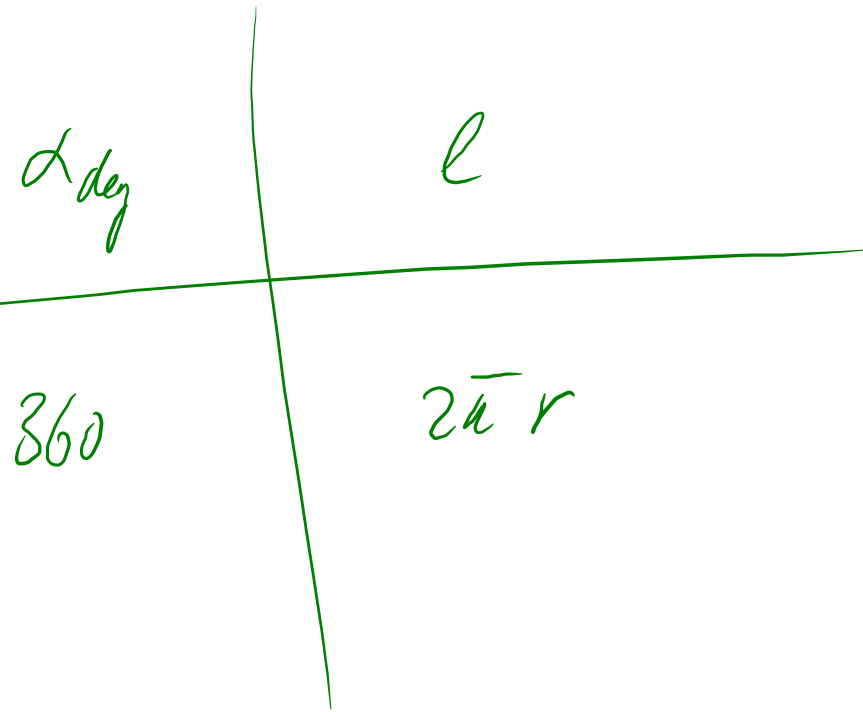


$$\alpha_{\text{deg}} \cdot 2\pi \cdot r = 360^\circ l$$

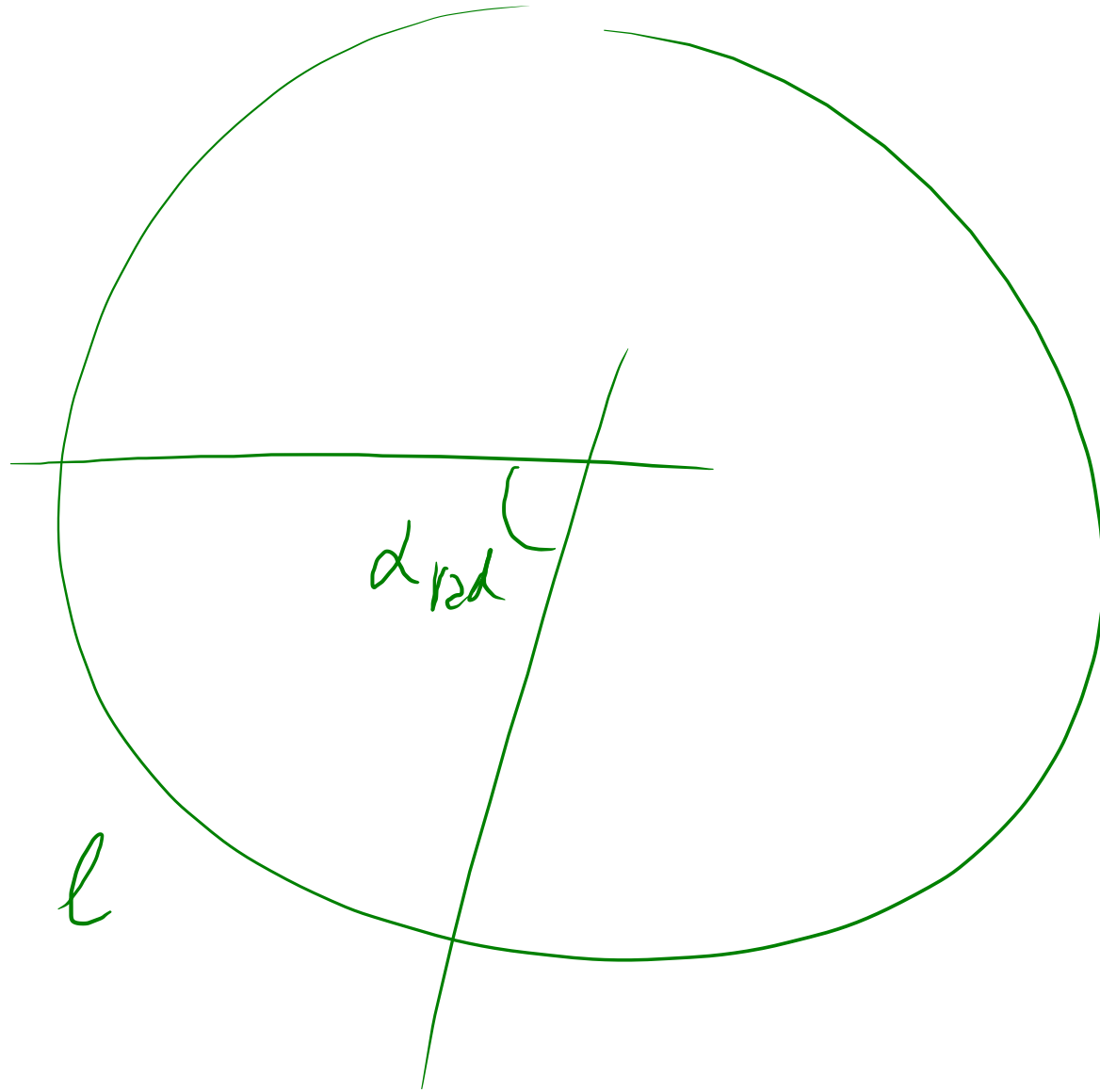
$$r = \frac{360^\circ \cdot l}{\alpha_{\text{deg}} \cdot 2\pi}$$



$$\frac{\alpha_{\text{deg}}}{360} = \frac{l}{2\pi \cdot r}$$



$$l = 2\pi r \cdot \frac{\alpha_{\text{deg}}}{360^\circ} = \frac{\pi \cdot r \cdot \alpha_{\text{deg}}}{180^\circ}$$

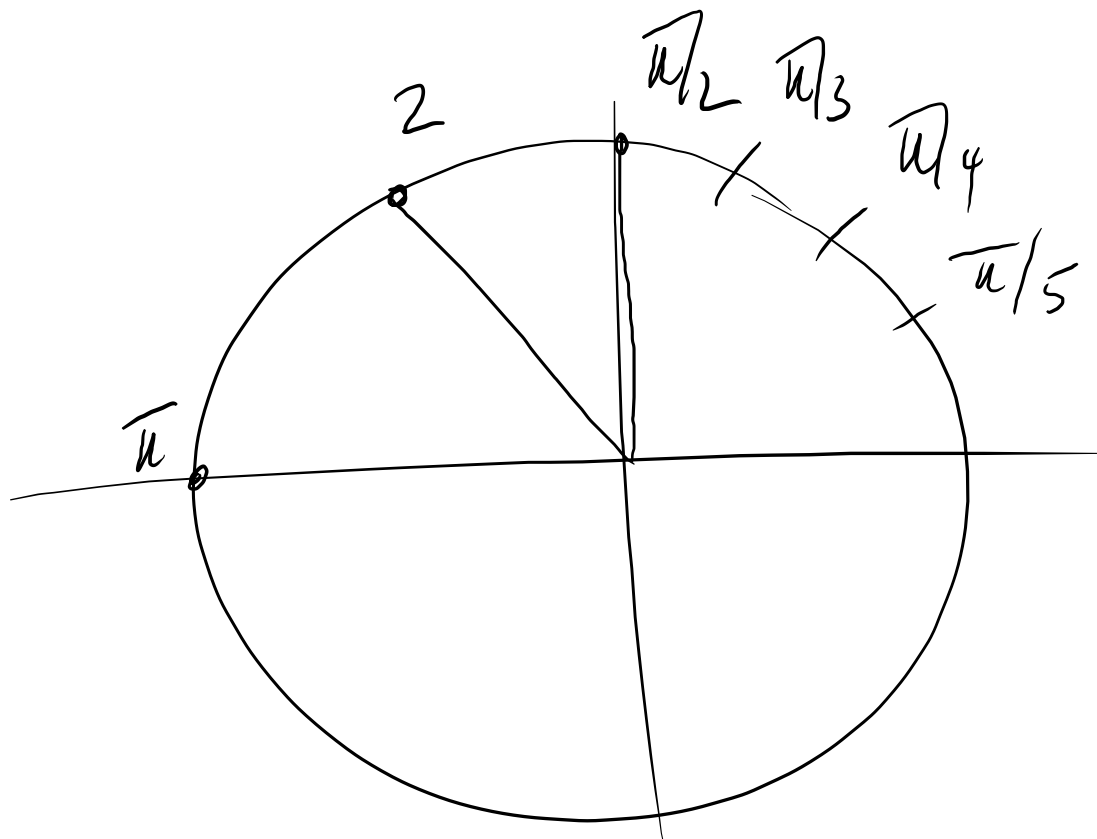


$$\frac{d_{rad}}{\cancel{2\pi}} = \frac{l}{\cancel{2\pi} r}$$

$$d_{rad} = \frac{l}{r}$$

$$l = r d_{rad}$$

$$r = \frac{l}{d_{rad}}$$



$$1.57 < 2 < \pi$$

$$2 = \frac{\pi}{?}$$

$$? = \frac{\pi}{2} \approx 1.57$$

$$2 = \frac{\pi}{1.57}$$