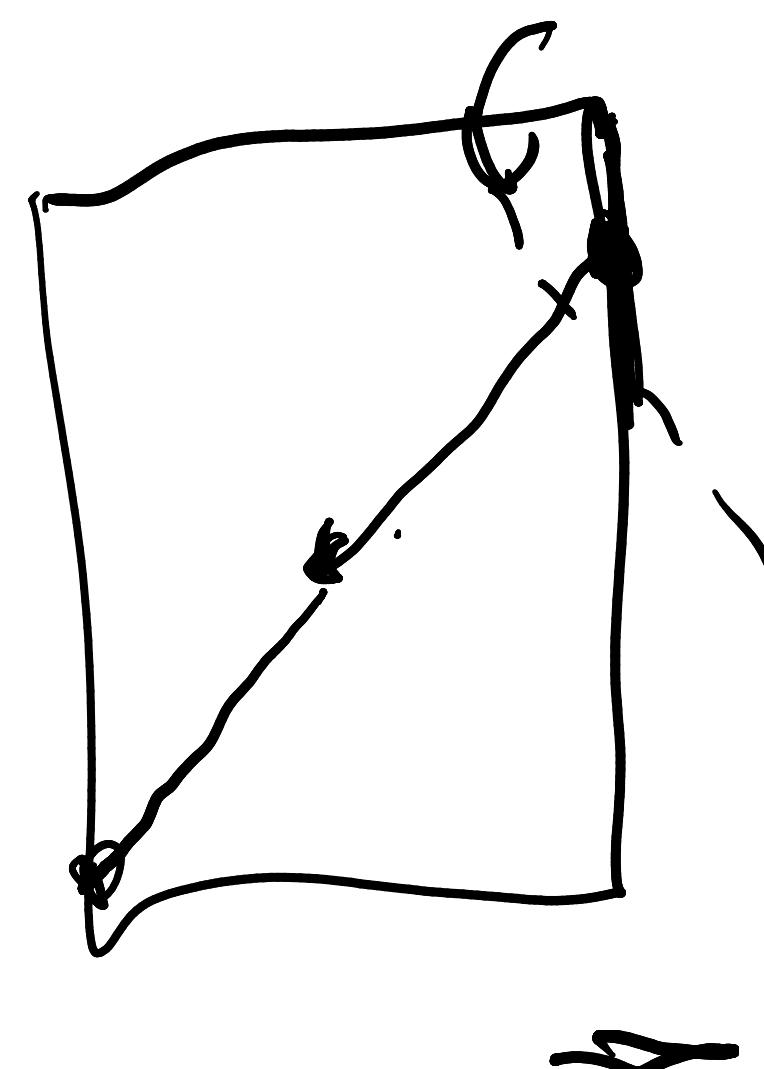
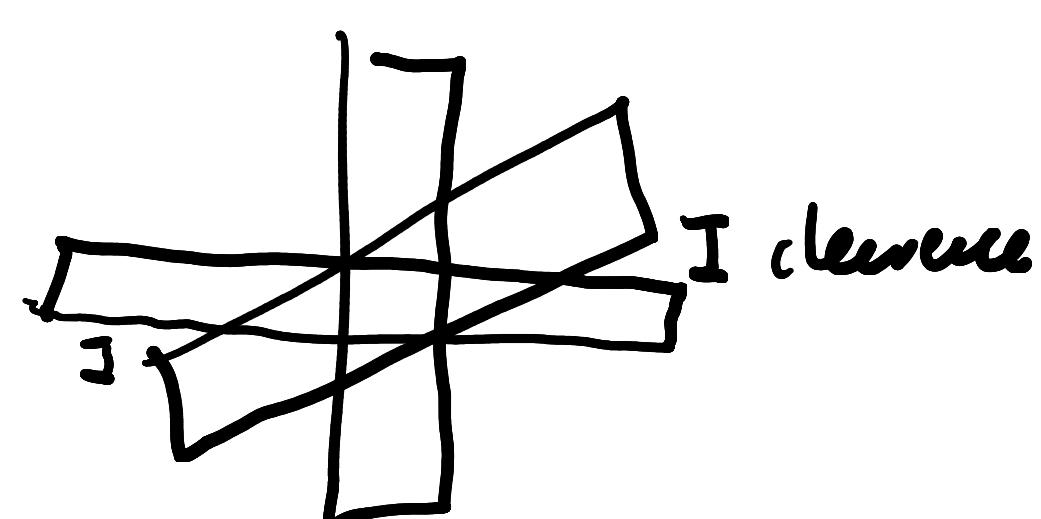
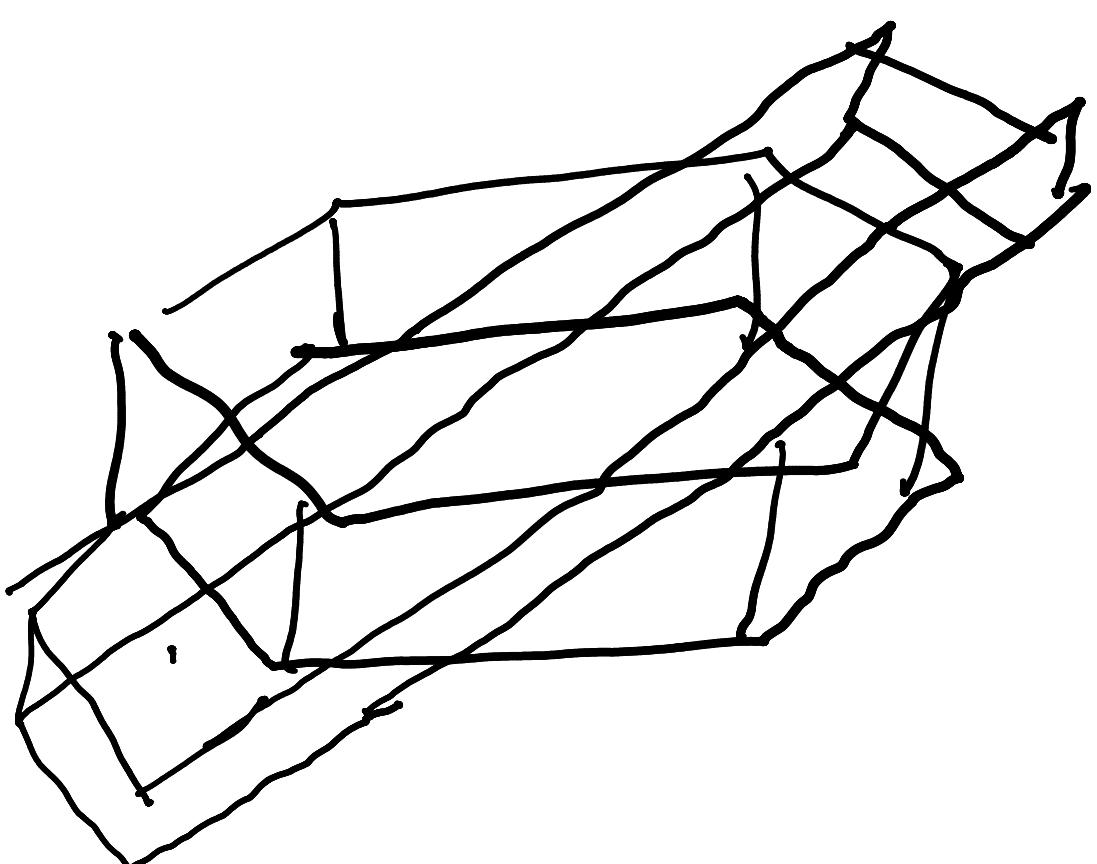
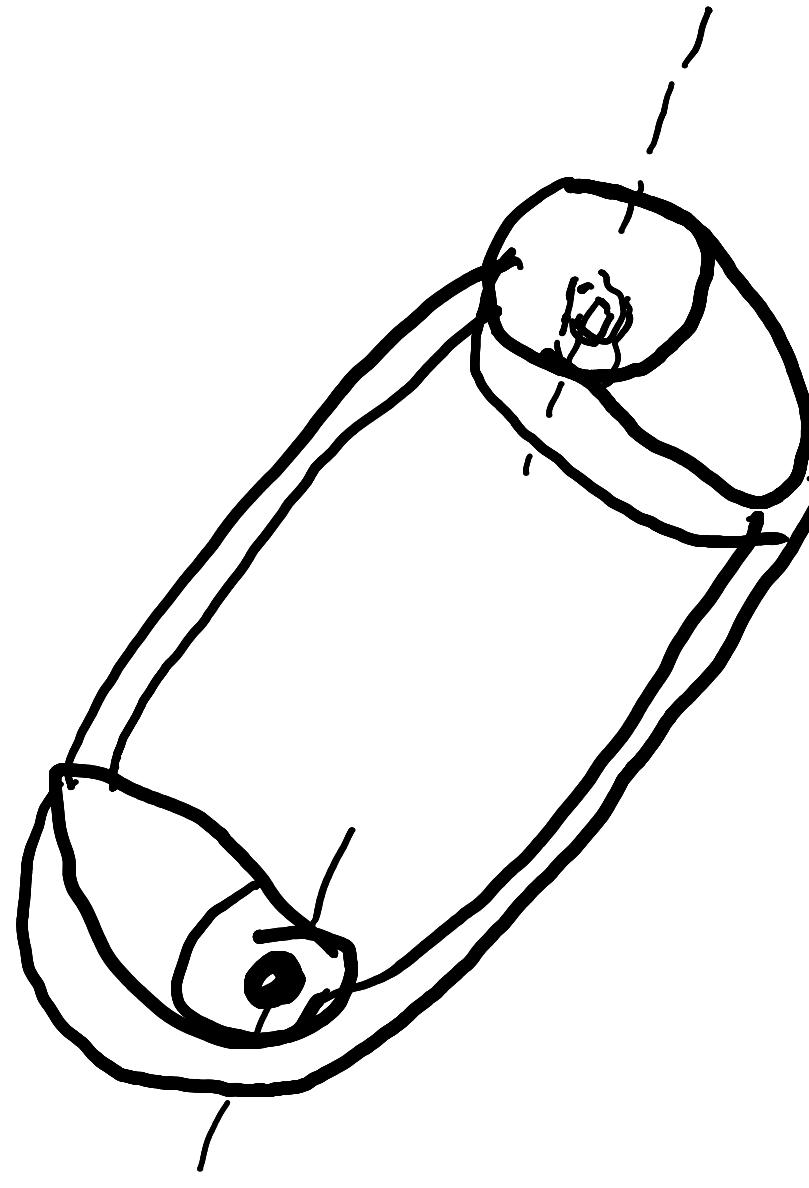
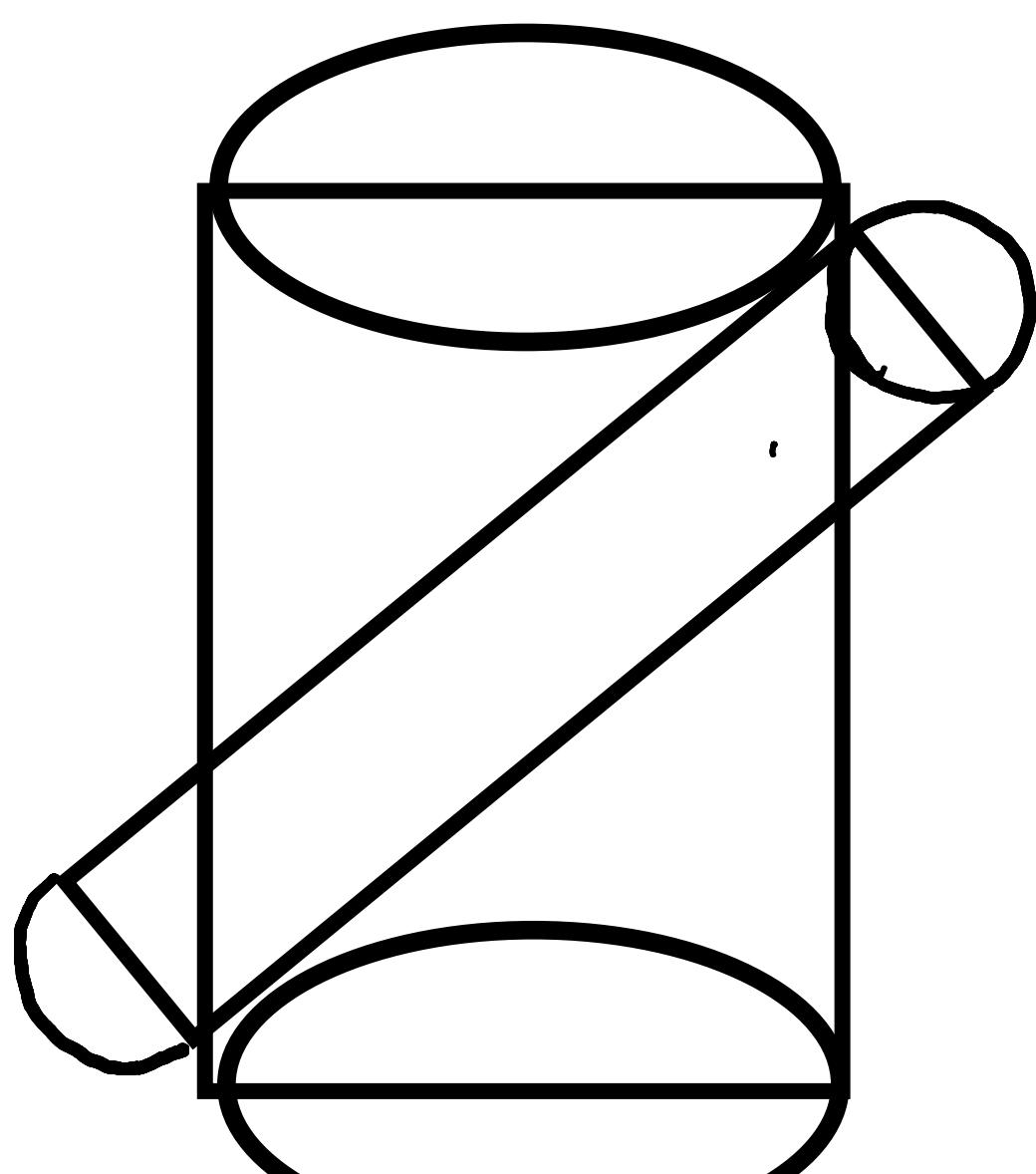
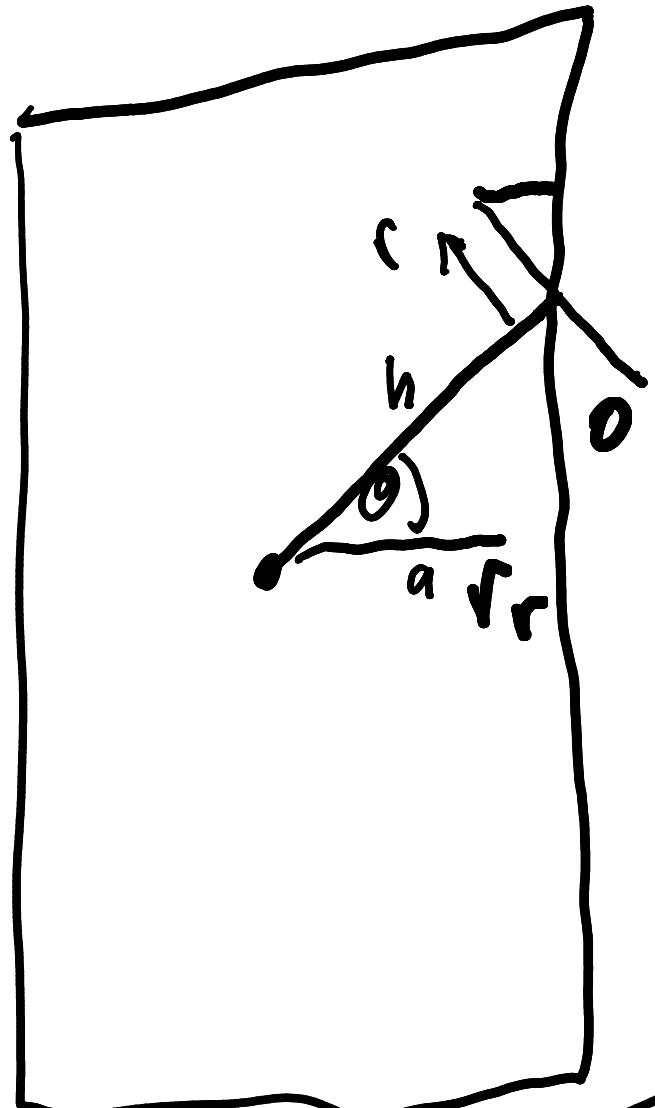


$$\cos \theta = \frac{R}{H}$$



$\sin \theta$   $C_H$   $T_d$





$$\cos \theta = \frac{r_r/h}{h}$$

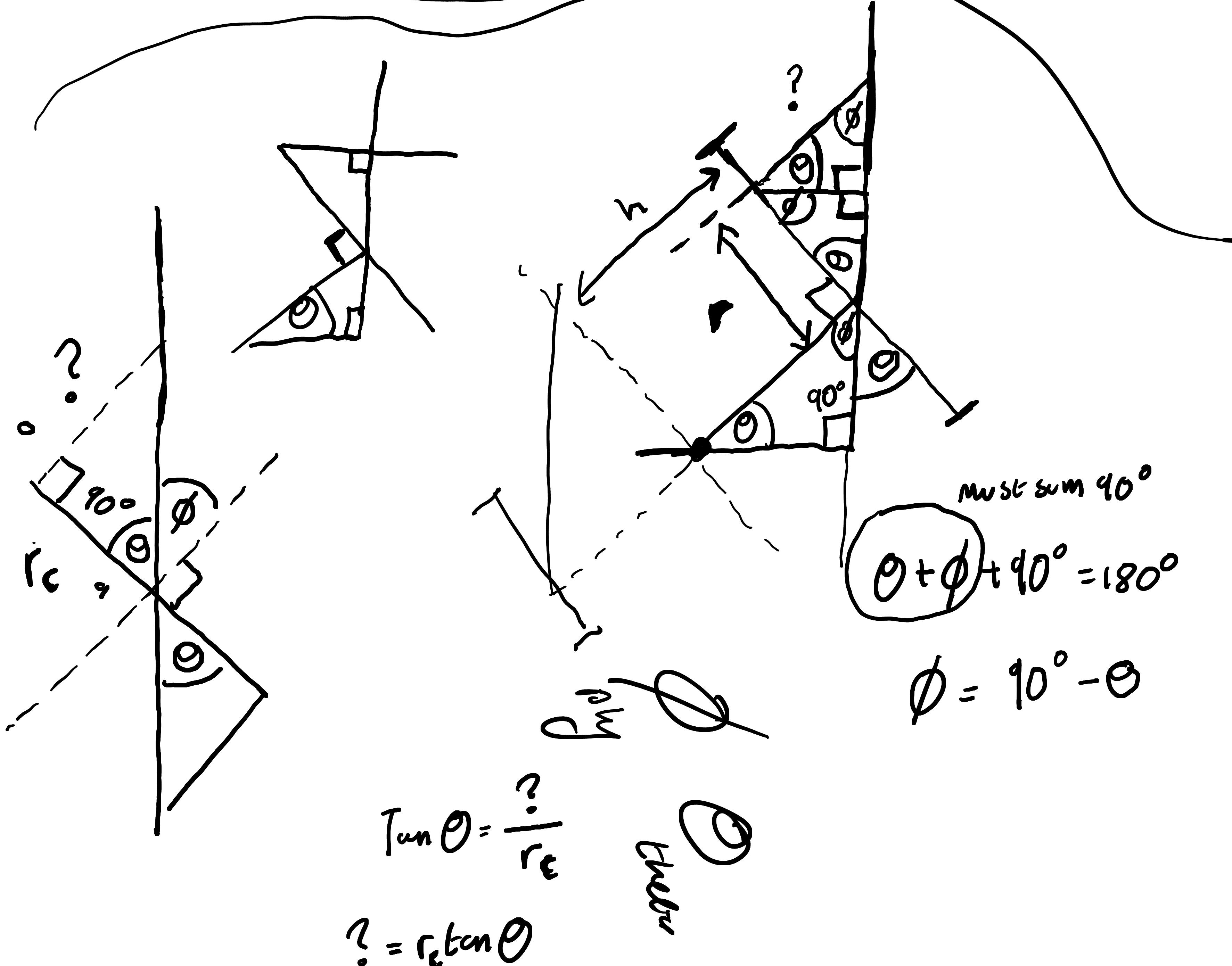
$S_H^o C_H^o T_A^o$

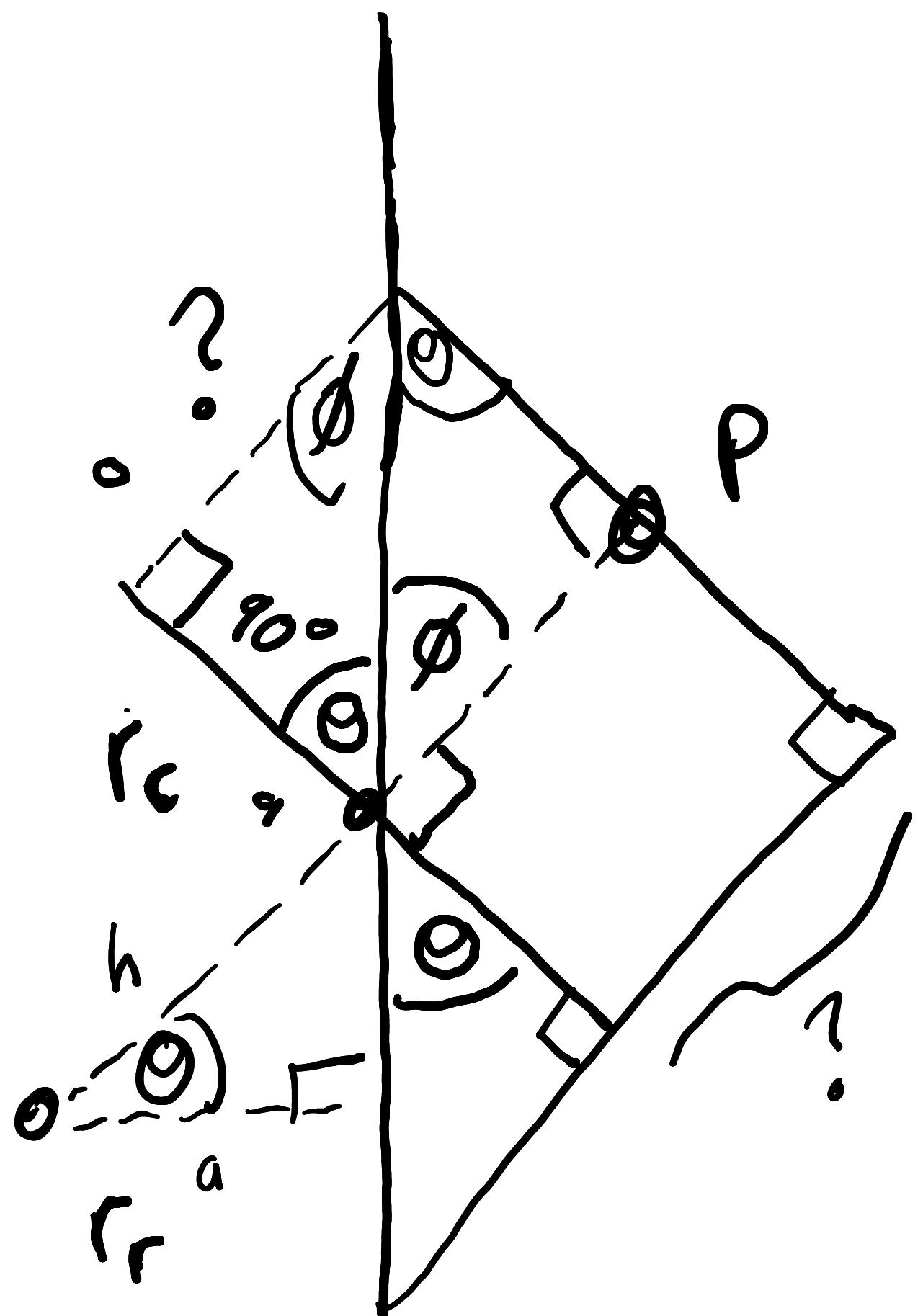
$$\cos \theta = \frac{r_r}{h}$$

$$h = \frac{r_r}{\cos \theta}$$

Final formula

$$\text{Projection length} = \frac{r_r}{\cos \theta} + r_c \tan \theta$$

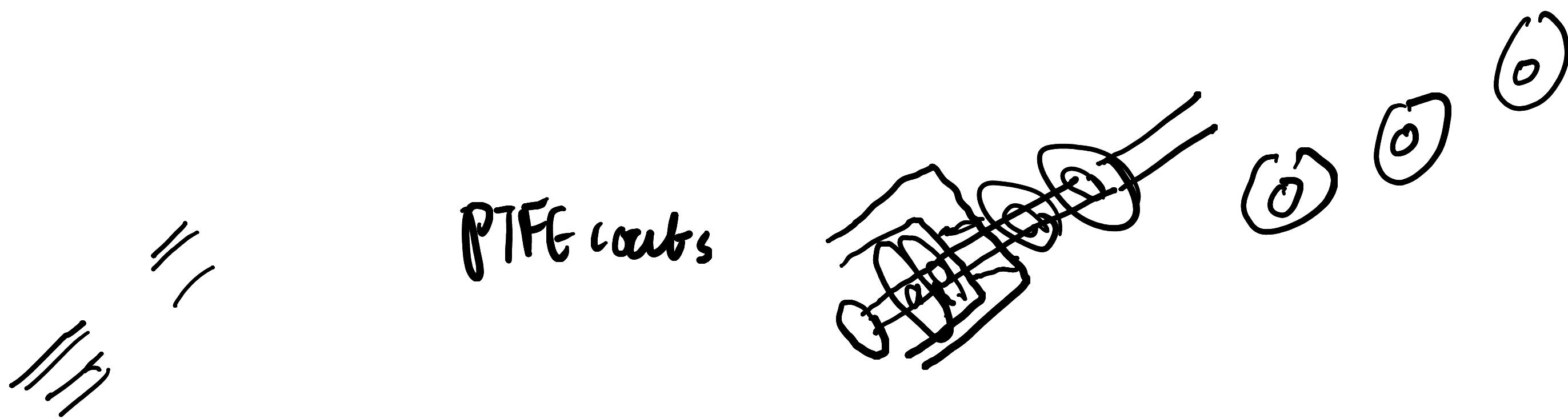
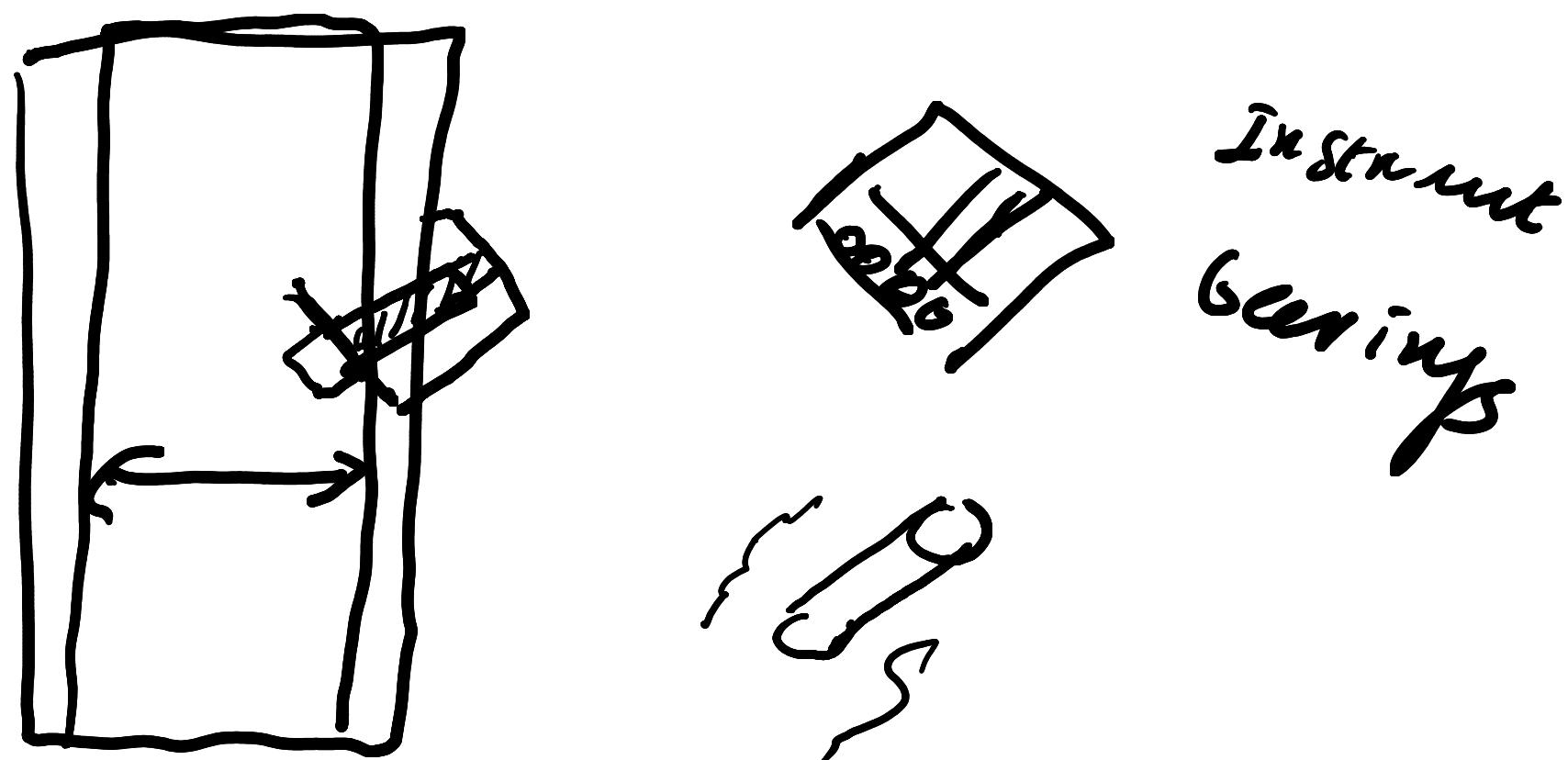


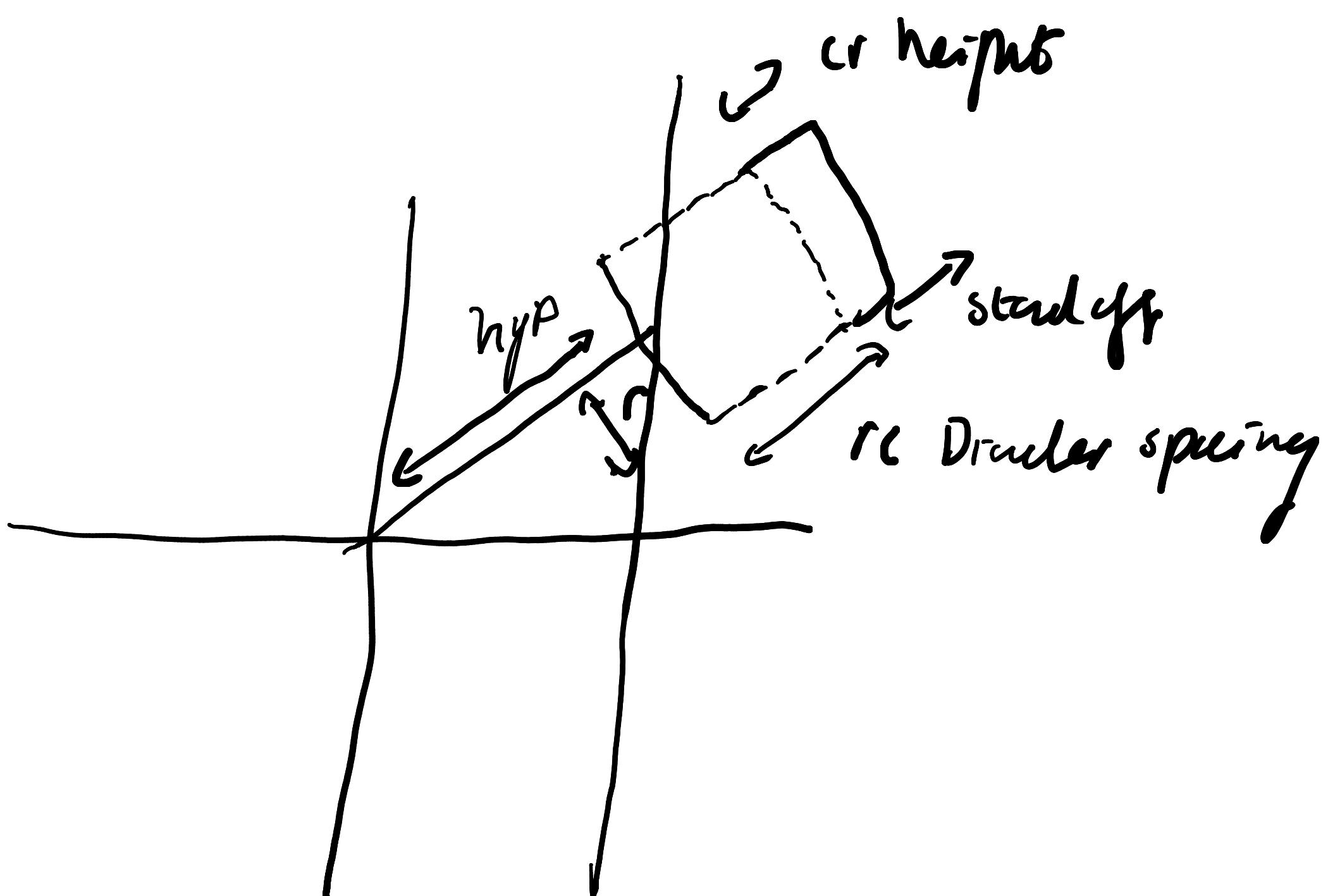
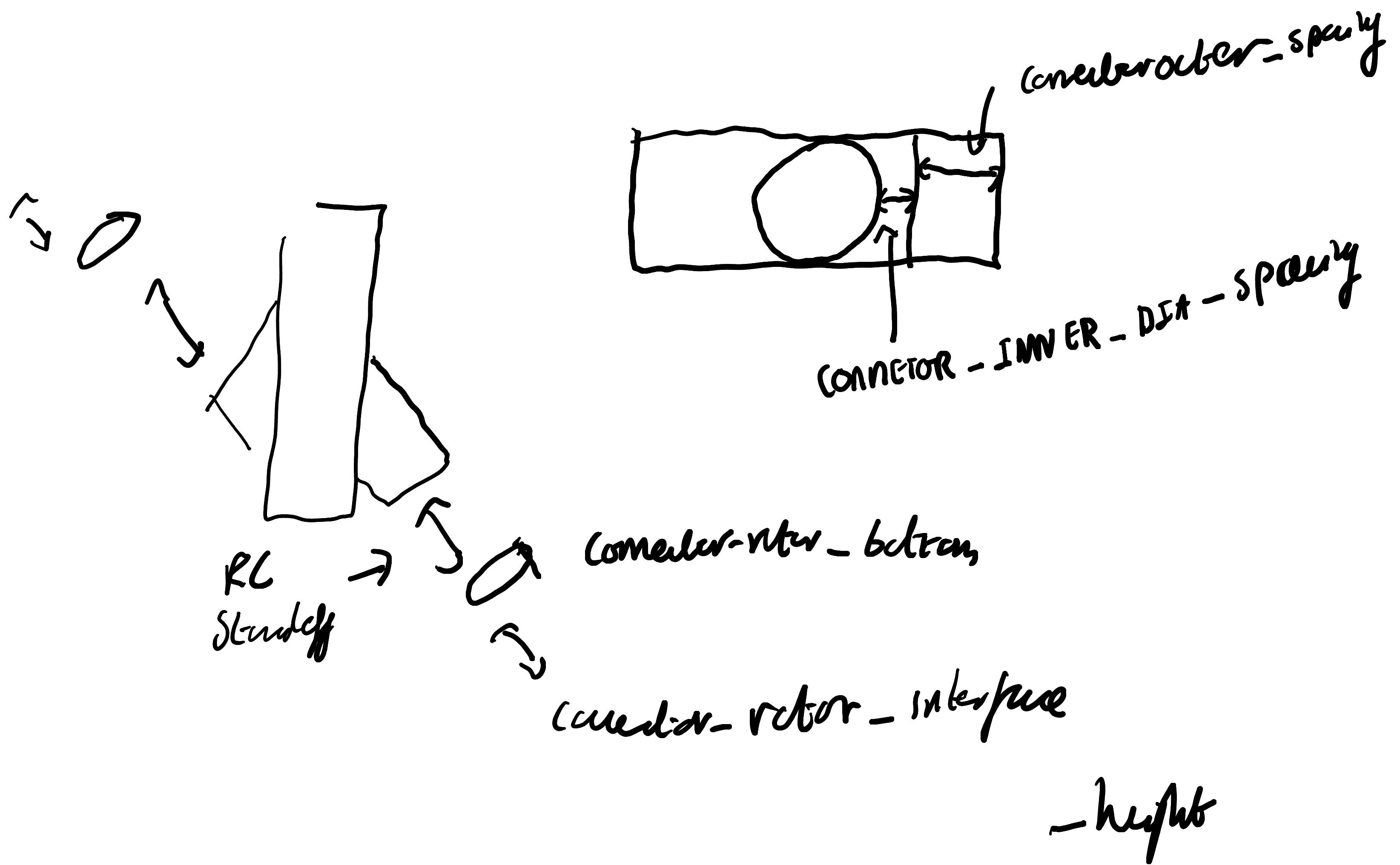


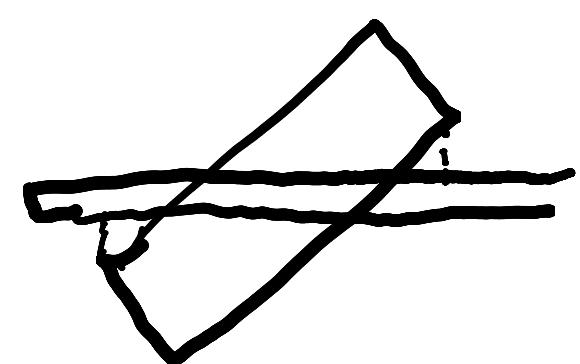
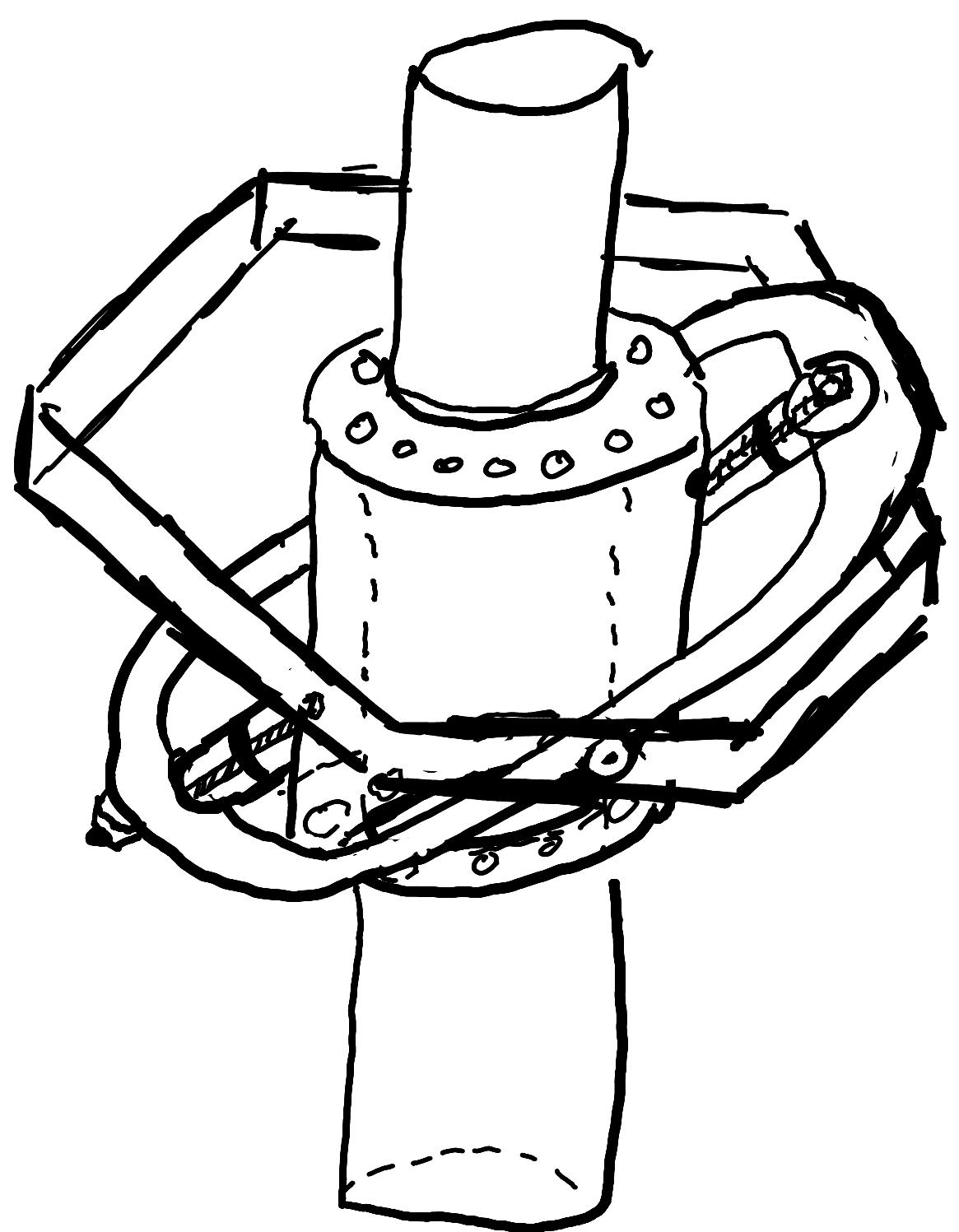
what is the distance  
from P to midpoint?

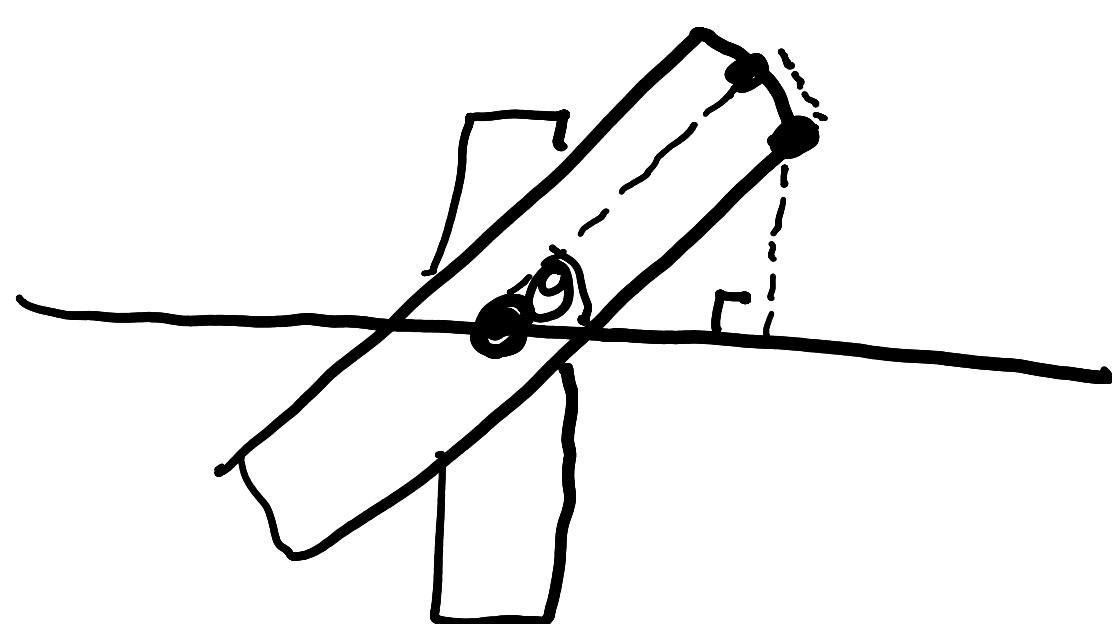
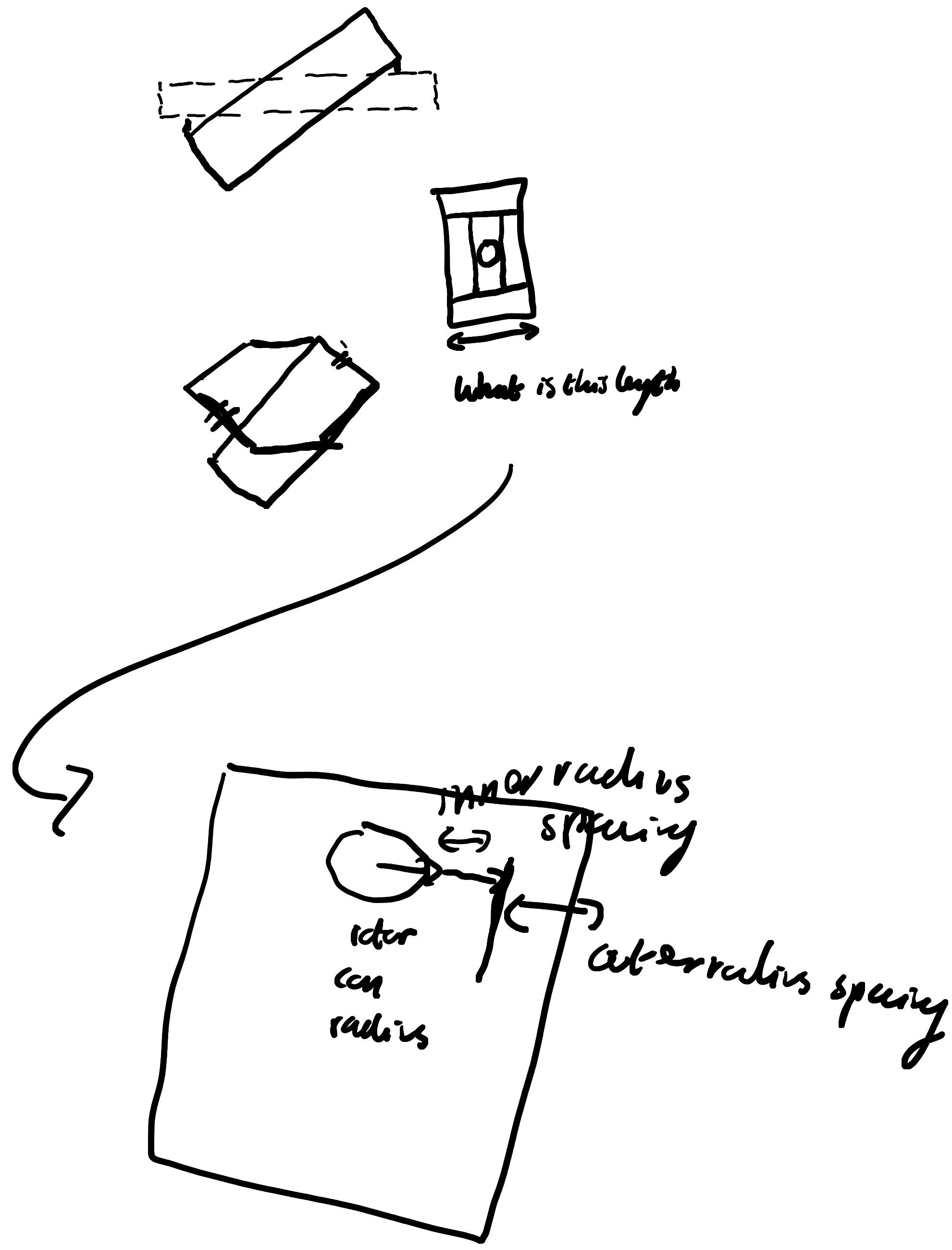
$$h + r_c \tan \theta$$

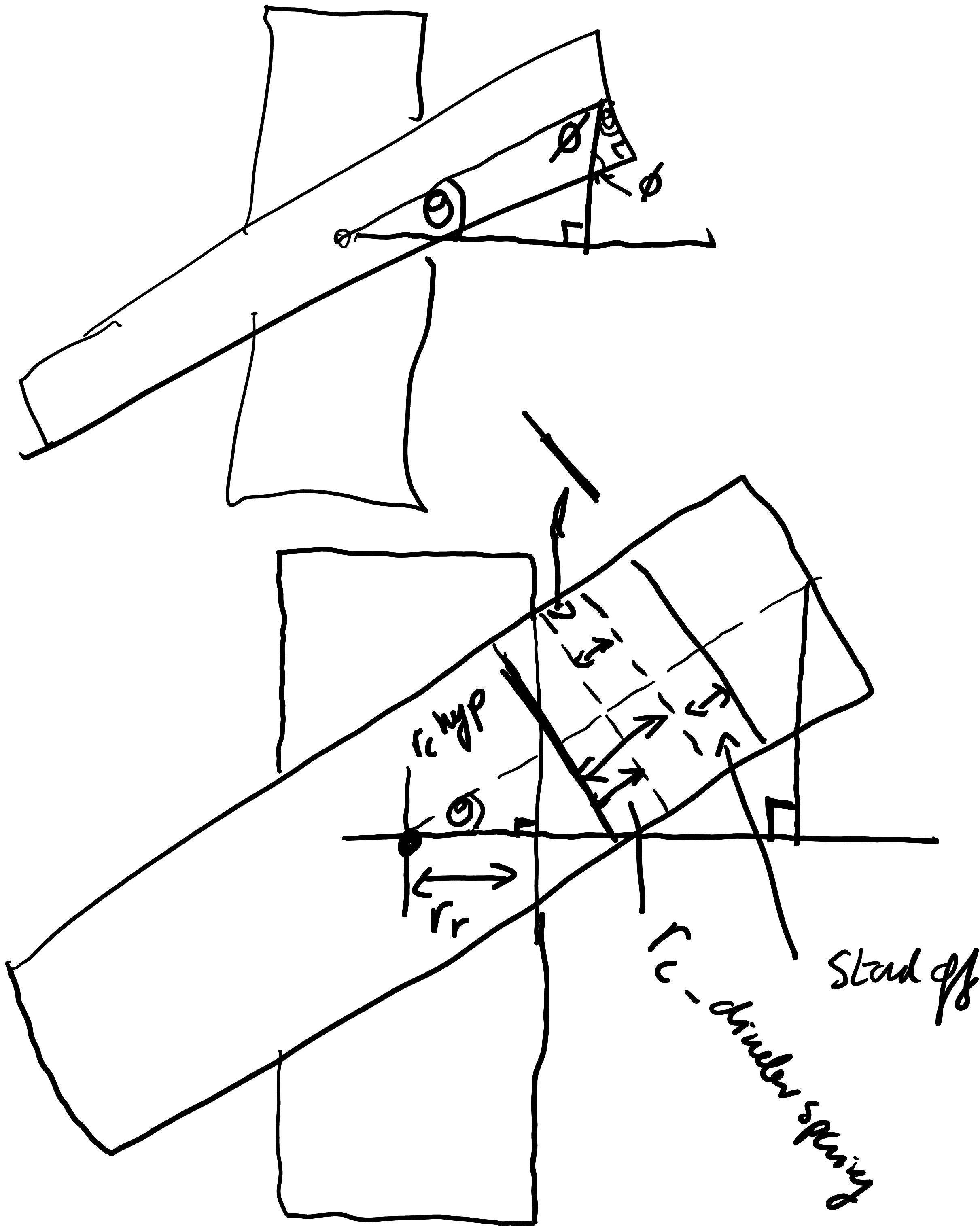
$$n = \frac{r_f / 2}{\cos \theta}$$









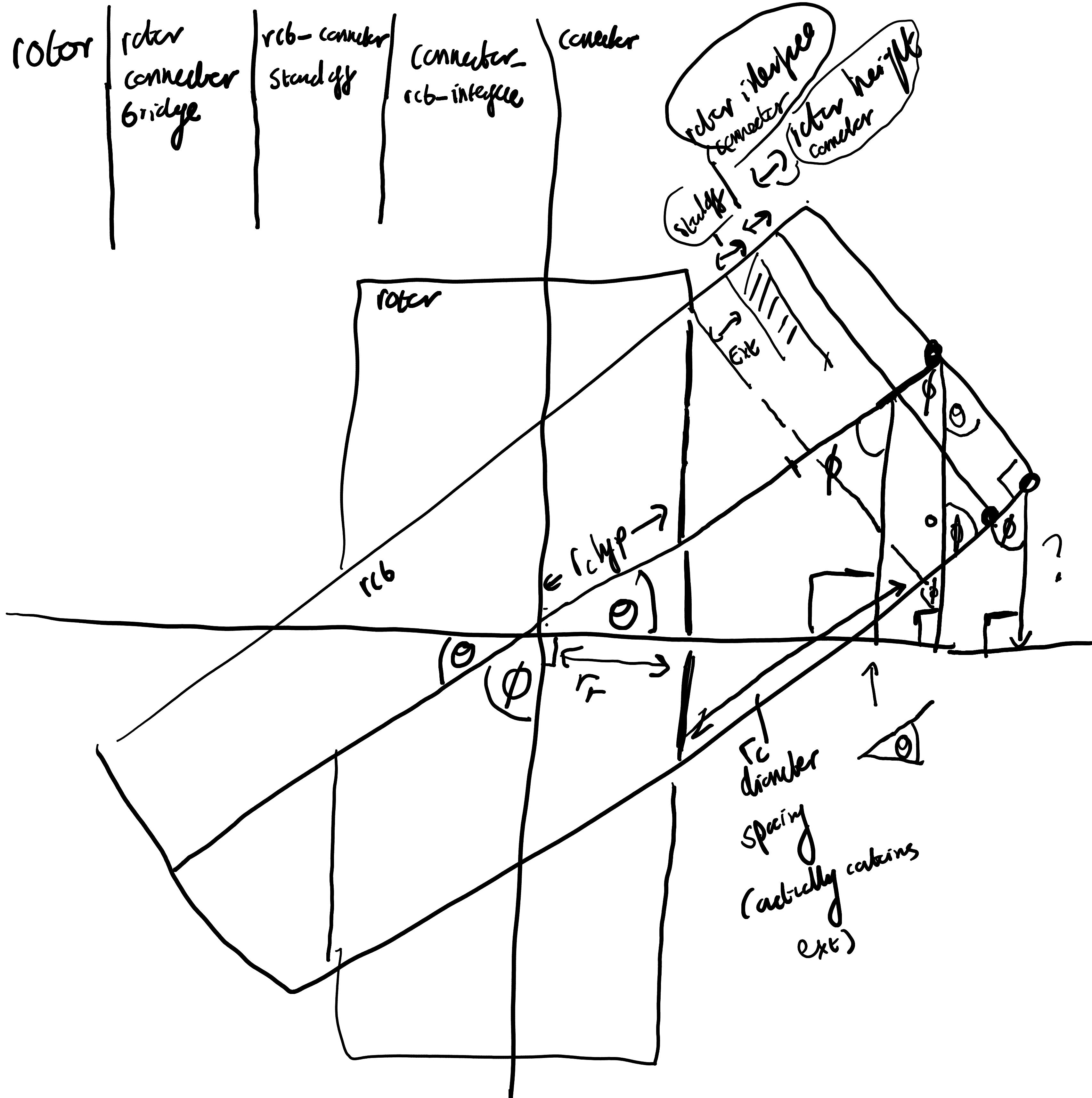


$r_c$  hyp +  $r_c$  - cylinder spacing  
 $r_c$  center  
+ Stand off +  $r_{ct}$  Inlet height  
+ Center-ribc - length

$$90 + \theta + \phi = 180$$

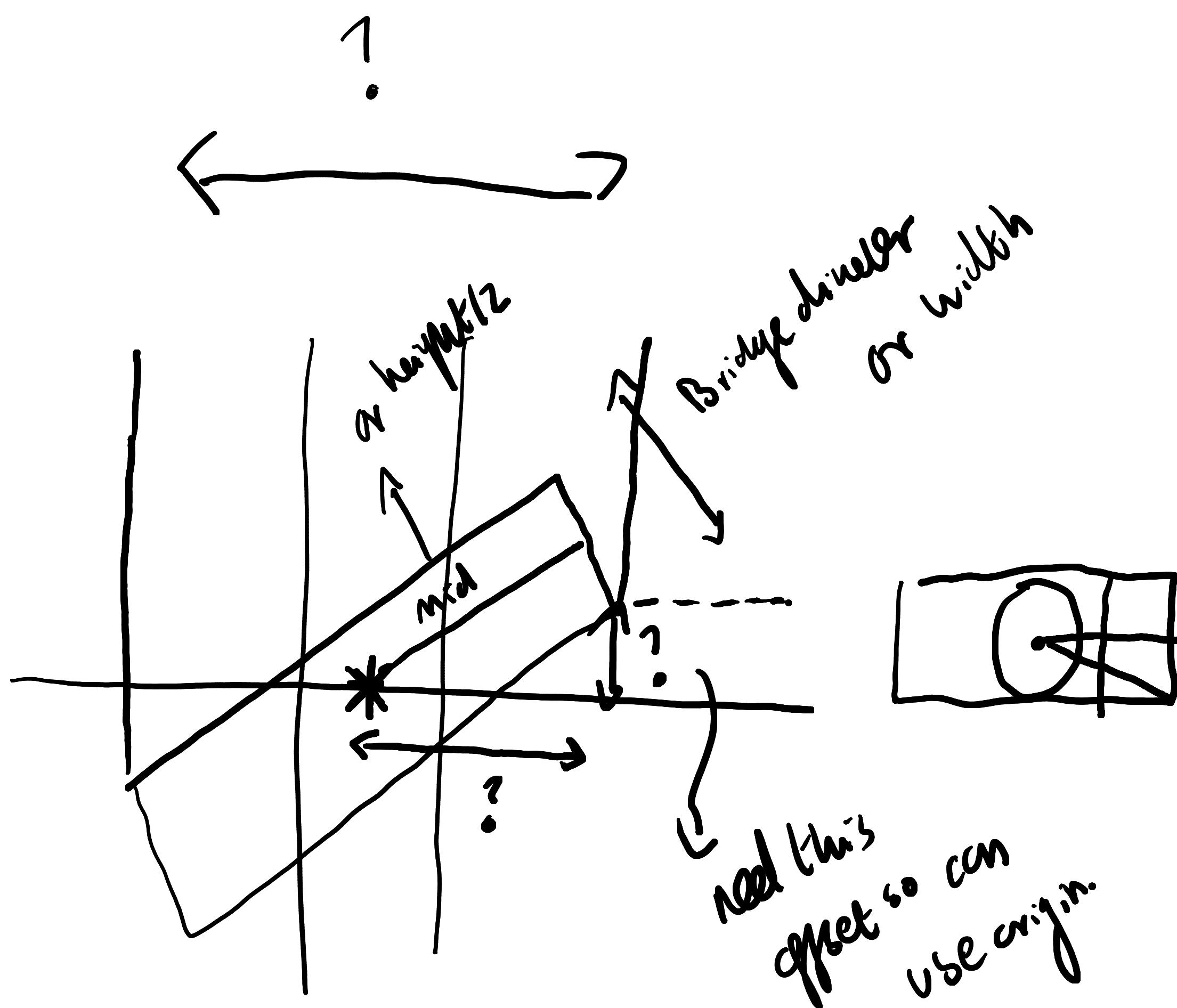
$$\theta + \phi = 90^\circ$$

good news



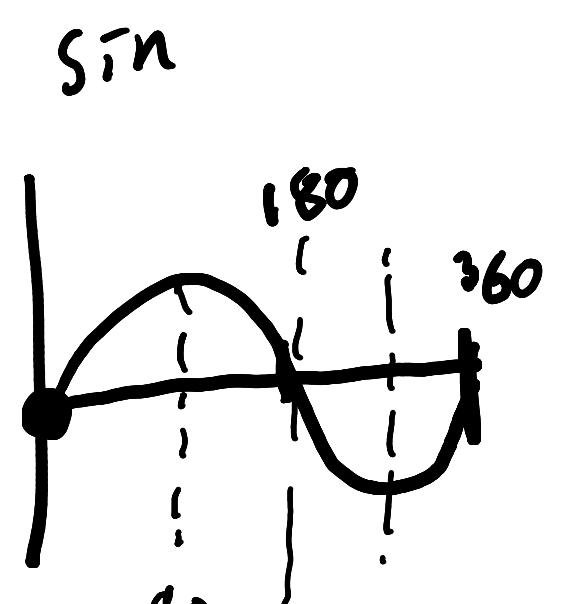
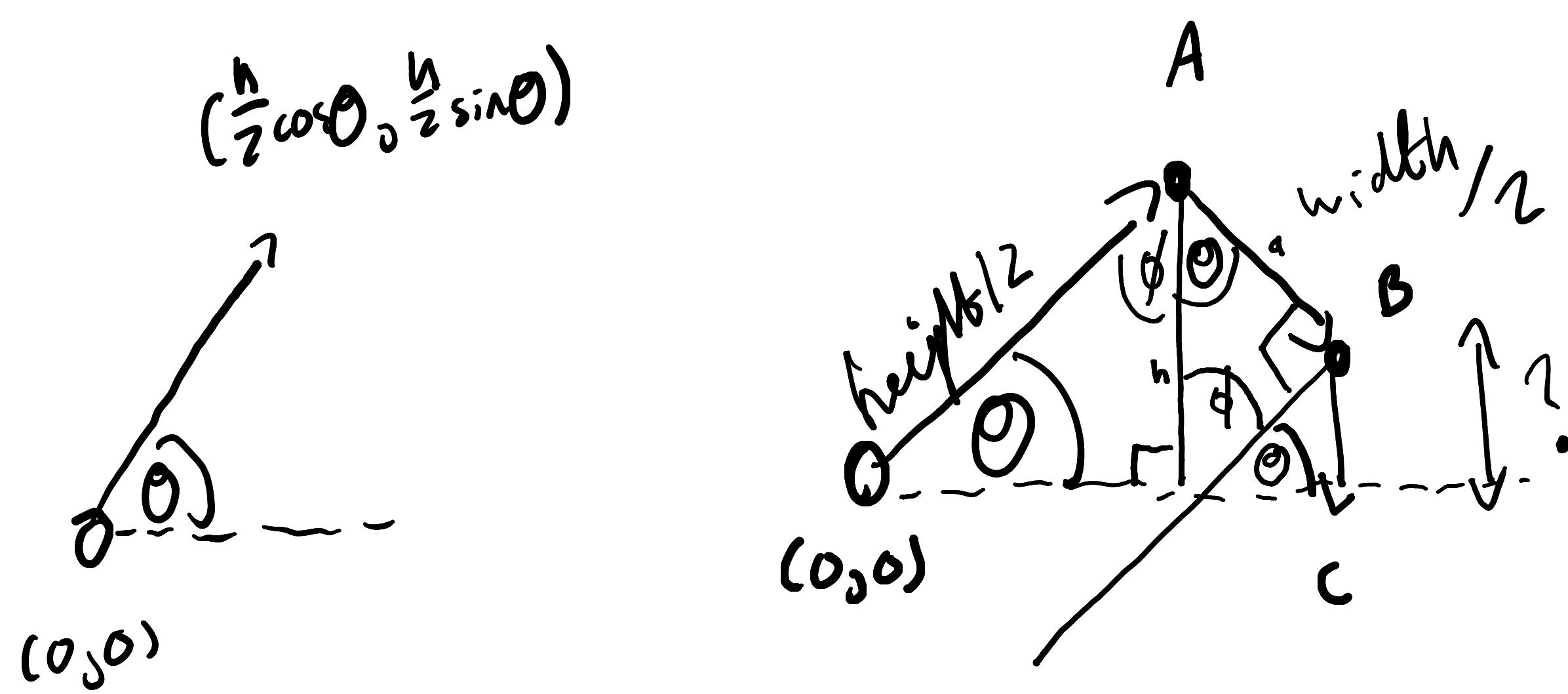
$r_{c\text{hyp}} + r_c \text{ diam}$   
spacing

+ rotor  
interface + rotor stage interface  
+ connector height



$$\cos(\theta + 90^\circ) = -\sin \theta$$

$$\sin(\theta + 90^\circ) = \cos \theta$$



$$\vec{OA} = \left( \frac{h}{2} \cos \theta, \frac{h}{2} \sin \theta \right) - (0, 0)$$

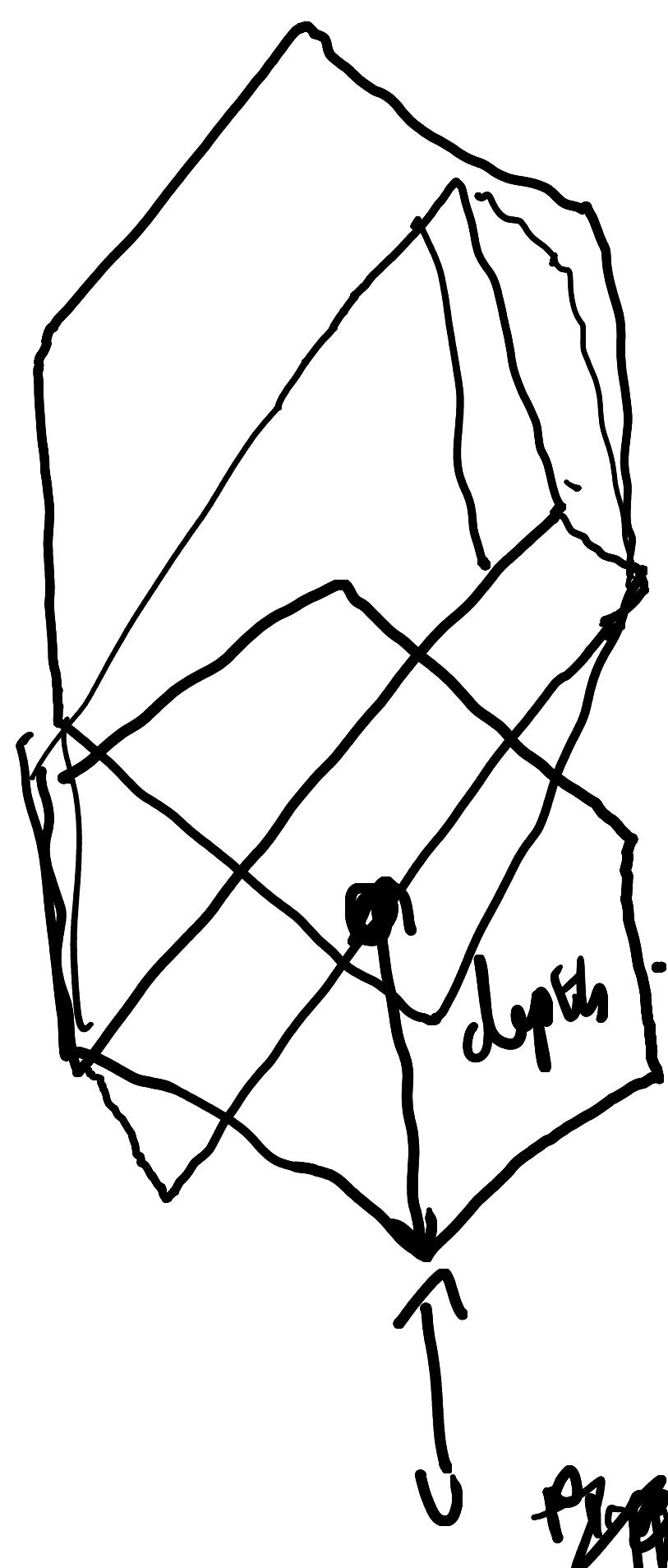
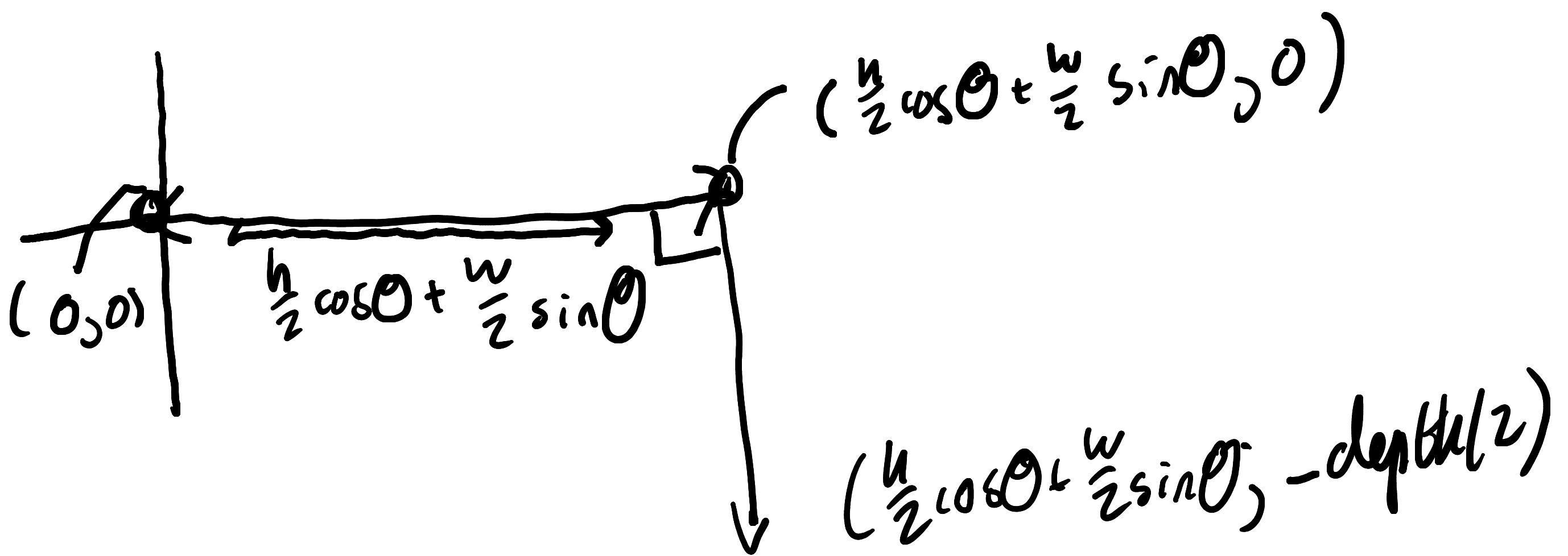
$$\vec{AB} = \vec{B} - \vec{A} = \left( \frac{w}{2} \cos(\theta + 90^\circ), \frac{w}{2} \sin(\theta + 90^\circ) \right) \\ = \left( -\frac{w}{2} \sin(\theta), \frac{w}{2} \cos(\theta) \right)$$

$$h = \frac{w/2}{\cos \theta}$$

$$\vec{OAB} = \left( \frac{h}{2} \cos \theta + \frac{w}{2} \sin \theta, \frac{h}{2} \sin \theta - \frac{w}{2} \cos \theta \right)$$

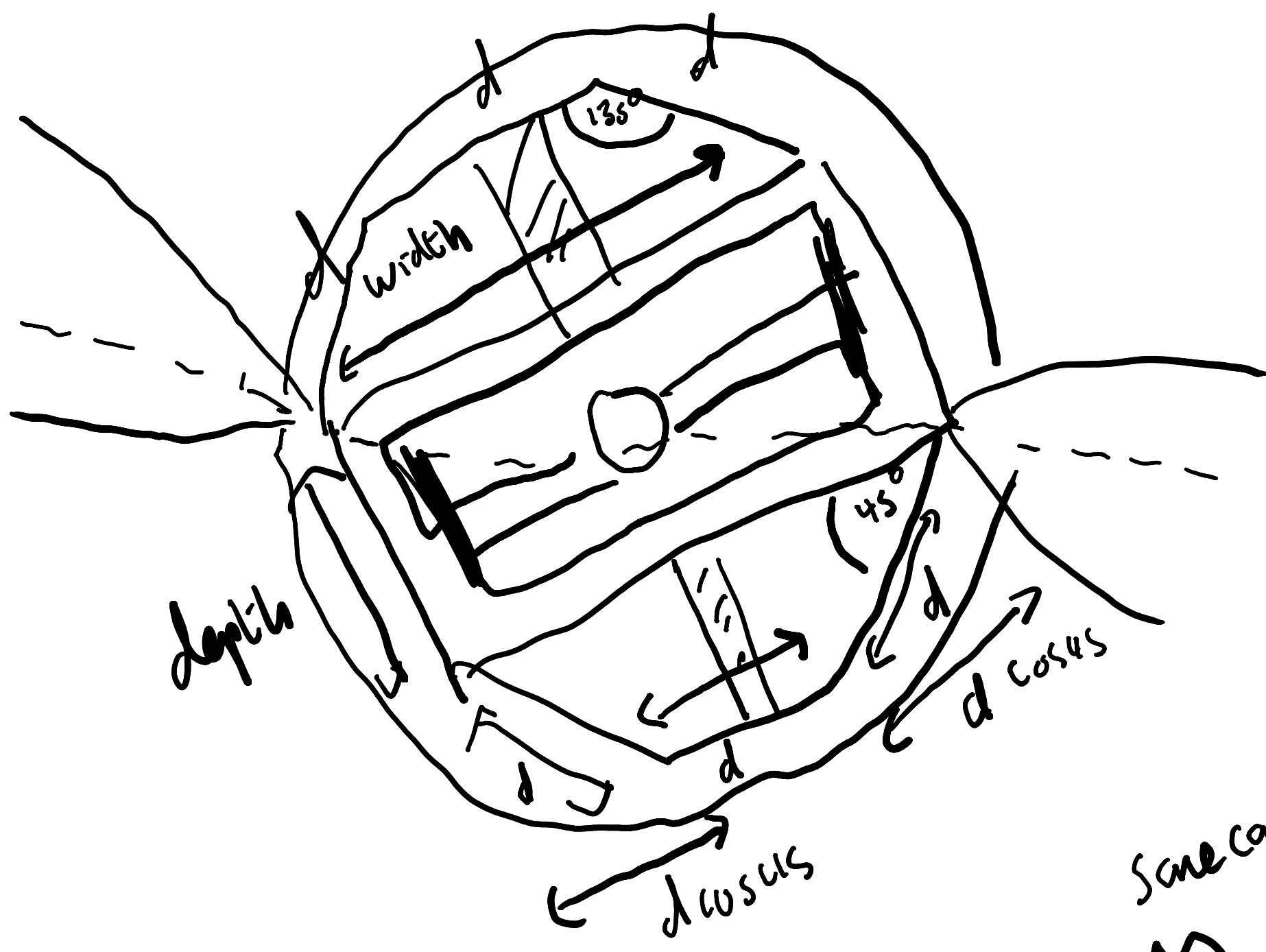
$$\overrightarrow{OA} = \left( \frac{h}{2} \cos\theta + \frac{w}{2} \sin\theta, \frac{h}{2} \sin\theta - \frac{w}{2} \cos\theta \right)$$

$x$                                      $y$



topper propeller - plane - hex - offset

g side 45° version

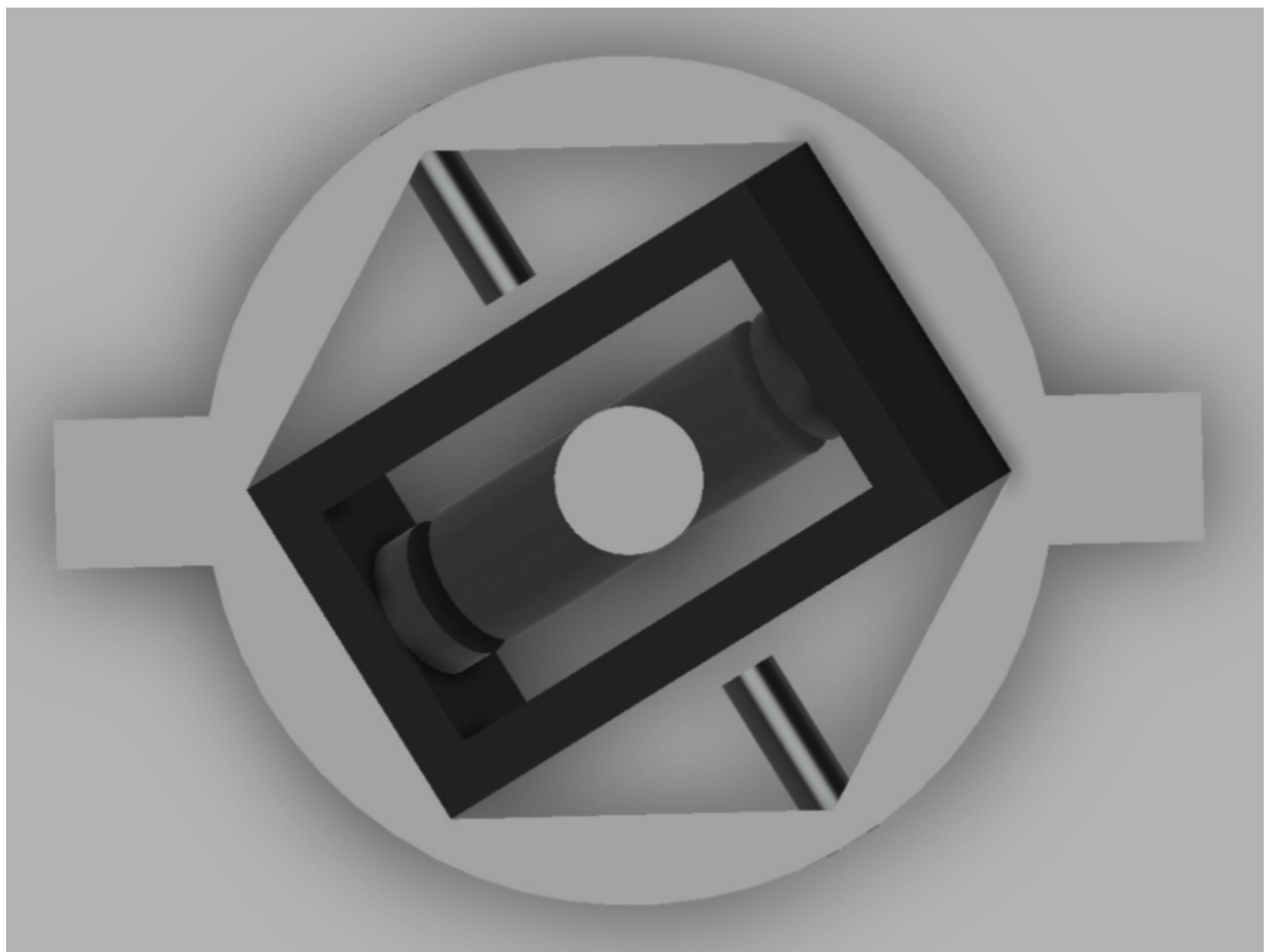


$$d \geq 2d \cos \alpha_S = \text{Width}$$

*Sane cast*

*Solve for  $d \dots$*

Top Profile



Home Profile

