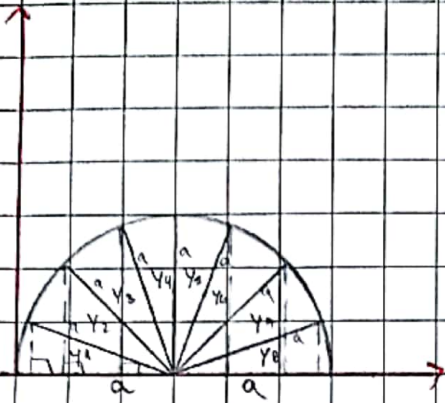


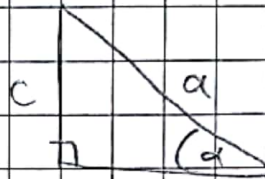
$$\alpha = 22,5^\circ$$

$$\beta = 67,5^\circ$$

$$\frac{a}{\sin(90)} = \frac{c}{\sin(22,5)}$$

$$c = \sin(22,5) a$$

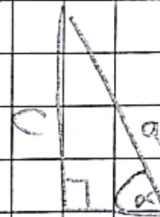
$$h = \frac{2a}{8} = \frac{a}{4}$$



$$\alpha = 45^\circ$$

$$\frac{a}{\sin(90)} = \frac{c}{\sin 45}$$

$$c = \frac{\sqrt{2}}{2} a$$



$$\alpha = 67,5^\circ$$

$$\frac{a}{\sin(90)} = \frac{c}{\sin(67,5)}$$

$$c = a \sin(67,5)$$

$$A_x = \frac{a}{12} \left(a \sin(22,5^\circ) + \frac{\sqrt{2}}{2} a + 2a \sin(67,5^\circ) + 4a + 2a + 4a \sin(67,5^\circ) + 2 \frac{\sqrt{2}}{2} a + 4 \sin(22,5^\circ) a + 1 \cdot 2a \right)$$

$$\frac{11 a^2}{2} = 1,57 a^2 //$$

$$A_x = \frac{a^2 \cdot 11,7}{12} = 1,64 a^2 //$$

$$\% \text{ Error} = \frac{\text{Valor teórico} - \text{Valor exp.}}{\text{Valor teórico}} = \frac{1,57 - 1,64}{1,57} = 4\%$$