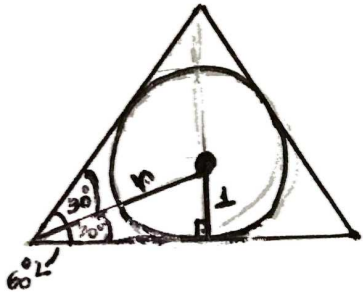


Lugar Geométrico e Pontos Notáveis do Triângulo

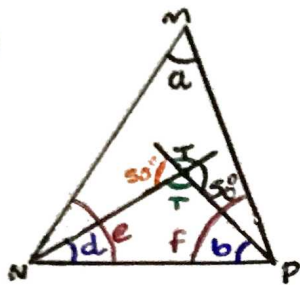
Naihara -CTII 317

①



$$\text{Sen } 30^\circ = \frac{r}{1} \Rightarrow \frac{1}{2} \times \frac{r}{1} \Rightarrow \boxed{r=2}$$

②



$$50^\circ + 50^\circ + T + T = 360^\circ$$

$$100^\circ + 2T = 360$$

$$2T = 260$$

$$T = \frac{260}{2} = 130^\circ //$$

↳ soma dos ângulos internos $= 180^\circ$

$$d + b + T = 180^\circ$$

$$d + b + 130^\circ = 180^\circ$$

$$d + b = 180^\circ - 130^\circ$$

$$d + b = 50^\circ //$$

↳ d e b são bissetrizes do ΔMNP

$$e = 2d \quad \left\{ \begin{array}{l} e + f = 2(d + b) \\ e + f = 2 \cdot 50^\circ \end{array} \right.$$

$$f = 2b \quad \left\{ \begin{array}{l} e + f = 2(d + b) \\ e + f = 2 \cdot 50^\circ \end{array} \right.$$

$$e + f = 100^\circ //$$

ΔMNP

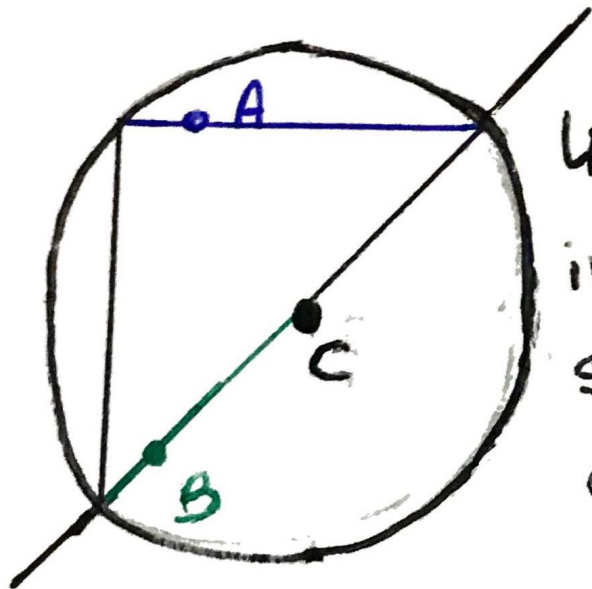
$$\hookrightarrow a + e + f = 180^\circ$$

$$a + 100^\circ = 180^\circ$$

$$a = 180^\circ - 100^\circ$$

$$a = 80^\circ$$

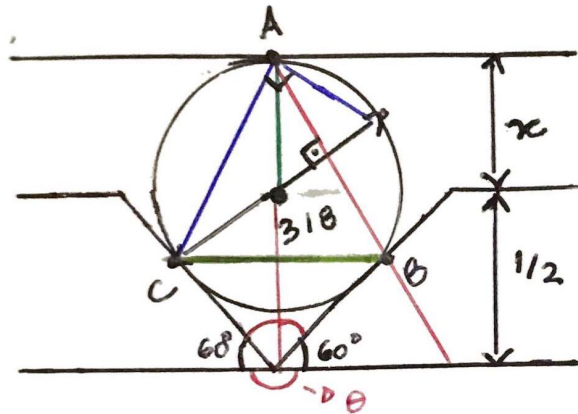
③



↳ Todo triângulo inscrito numa semi-circunferência é retângulo!

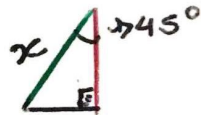
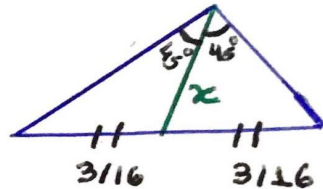
⑧

④

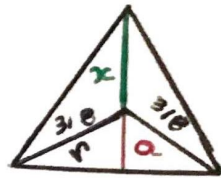


$$2\theta = 360^\circ - (2 \cdot 60^\circ)$$

$$2\theta = 240^\circ \rightarrow \theta = 120^\circ$$



$$x = ? ? ?$$

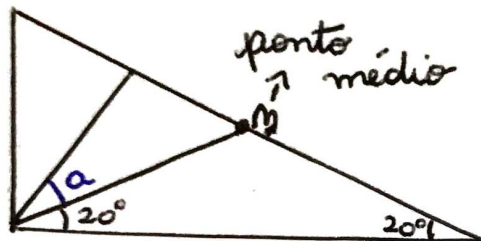


$$x = 3/8$$

$$a = \frac{3}{8} = \frac{3}{8} \cdot \frac{1}{2}$$

$$a = \frac{3}{16}$$

5

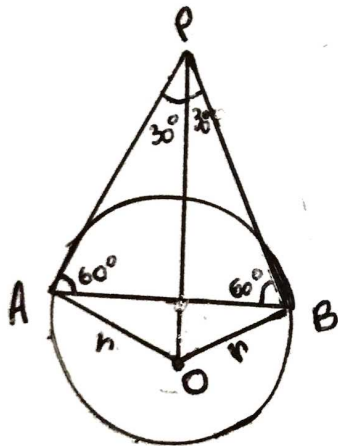


$$a) m = \frac{20}{2} = 10 \text{ mm}$$

$$b) a = 45^\circ - 20^\circ$$

$$a = 25^\circ$$

6



ΔOAP

$$\text{sen } \hat{OPA} = \frac{OA}{PO}$$

$$\text{sen } 30^\circ = \frac{1}{2} \rightarrow \frac{1}{2} \times \frac{r}{PO} \rightarrow PO = 2r$$