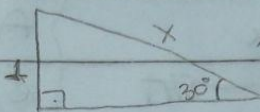
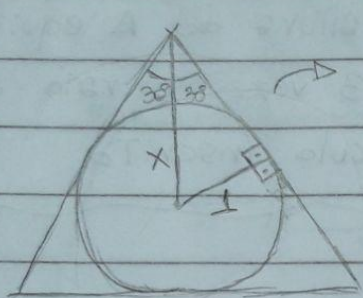


Tarefa Básica - Aula 6

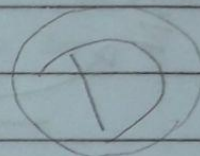
1.



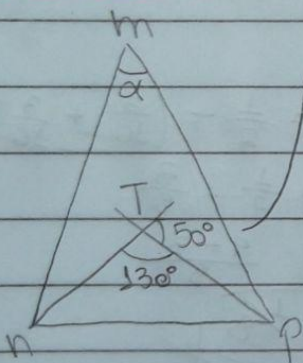
$$\text{sen } 30^\circ = \frac{1}{x}$$

$$\frac{1}{2} = \frac{1}{x}$$

$$\boxed{x = 2}$$



2.



$$180^\circ - 50^\circ = 130^\circ$$

$$\hat{n}\hat{T}P + \hat{T}P\hat{n} + \hat{P}\hat{n}T = 180^\circ$$

$$130^\circ + \hat{T}P\hat{n} + \hat{P}\hat{n}T = 180^\circ$$

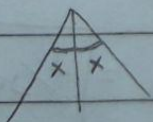
$$\boxed{\hat{T}P\hat{n} + \hat{P}\hat{n}T = 50^\circ}$$

Bissetriz

$$\hat{m}\hat{n}P + \hat{n}\hat{P}m = 2(\hat{T}P\hat{n} + \hat{P}\hat{n}T)$$

$$\Rightarrow \hat{m}\hat{n}P + \hat{n}\hat{P}m = 2(50^\circ)$$

$$\boxed{\hat{m}\hat{n}P + \hat{n}\hat{P}m = 100^\circ}$$

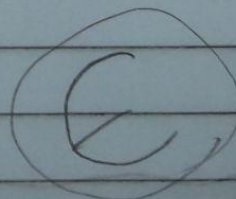


$$\hat{n}\hat{m}P + \hat{m}\hat{n}P + \hat{n}\hat{P}m = 180^\circ$$

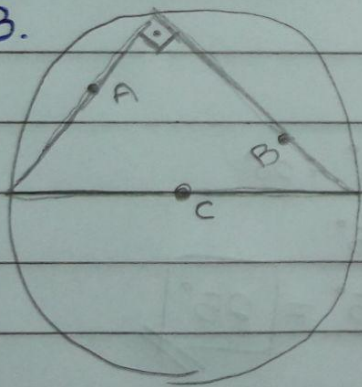
$$\hat{n}\hat{m}P + 100^\circ = 180^\circ$$

$$\hat{n}\hat{m}P = 180^\circ - 100^\circ = 80^\circ$$

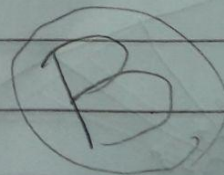
$$\boxed{\alpha = 80^\circ}$$



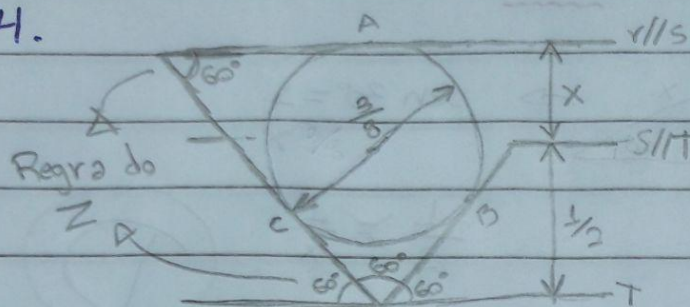
3.



Todo Triângulo inscrito na círculo, com dois vértices nos extremos do diâmetro e um vértice na circunferência \triangle será um triângulo retângulo.

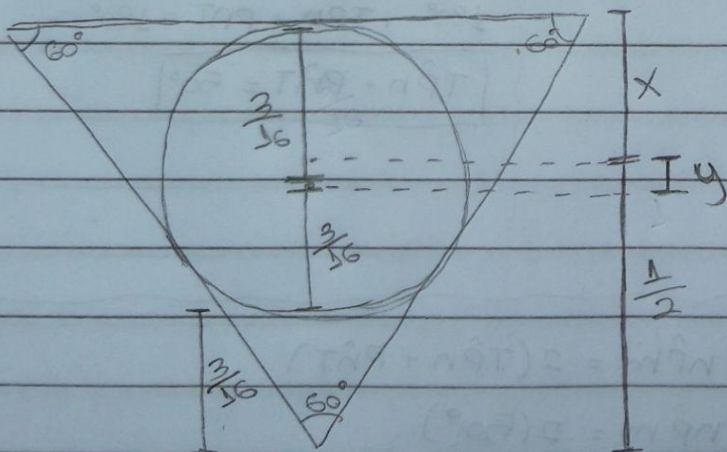


4.



A altura do \triangle equilátero é 3 vezes o raio do círculo inscrito

Triângulo equilátero



$$y = \frac{1}{2} - \left(\frac{3}{16} + \frac{3}{16} \right)$$

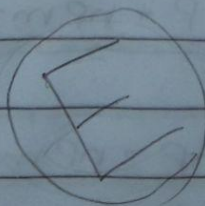
$$y = \frac{1}{2} - \frac{3}{8}$$

$$y = \frac{4-3}{8}$$

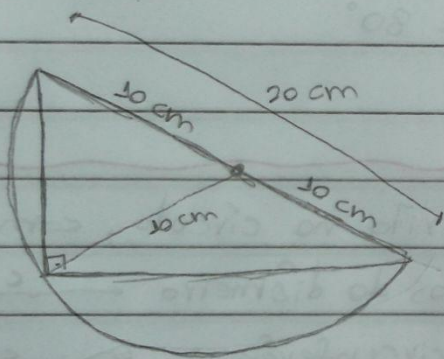
$$y = \frac{1}{8}$$

$$x = \frac{3}{16} - \frac{1}{8}$$

$$x = \frac{3-2}{16} = \frac{1}{16}$$



5.



a) considerando 20 cm o diâmetro da circunferência, a medida da mediana da hipotenusa é:

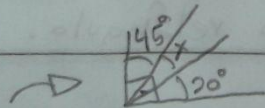
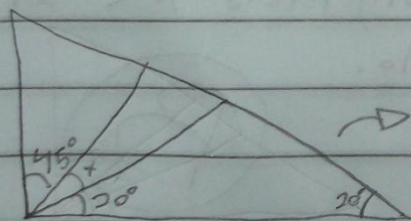
$$\boxed{10 \text{ cm}}$$

b)

$$90^\circ = x + 45^\circ + 20^\circ$$

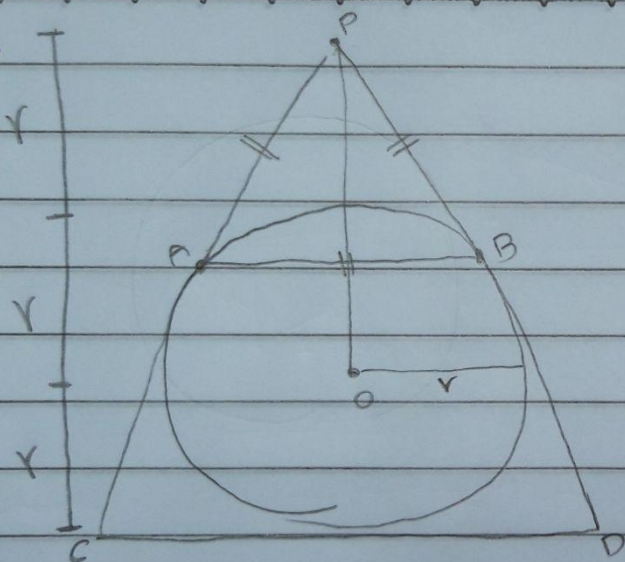
$$90^\circ = x + 65^\circ$$

$$x = 90^\circ - 65^\circ = \boxed{25^\circ}$$



→ isósceles

6.



$$\triangle ABP \sim \triangle CDP$$

A altura do \triangle equilátero é 3 vezes o raio do círculo inscrito!

$$h = 3r \rightarrow \boxed{PO = 2r}$$

(C)