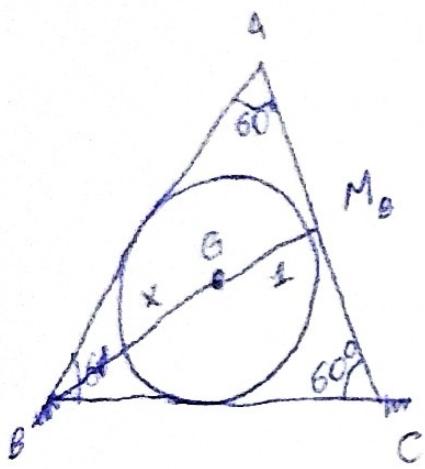


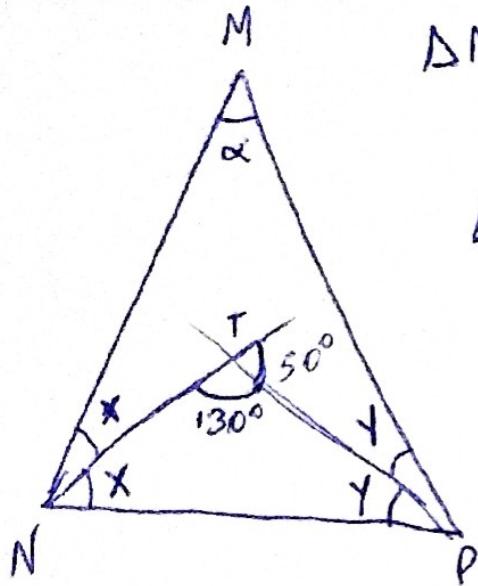
1.



No triângulo ~~retângulo~~ equilátero, todos os pontos notáveis são coincidentes, então coríbaricentro:

$$\frac{x}{r} \Rightarrow \frac{x}{1} = \frac{2}{1} = x = \underline{\underline{2}} \quad \textcircled{D}$$

2.



$$\Delta MNP \rightarrow \alpha^\circ = 180^\circ - 2x - 2y \implies \alpha^\circ + 2x + 2y = 180^\circ$$

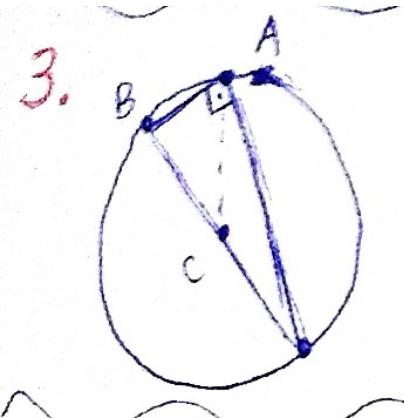
$$\Delta NTP \rightarrow 130^\circ + x + y = 180^\circ$$

$$x + y = 50^\circ$$

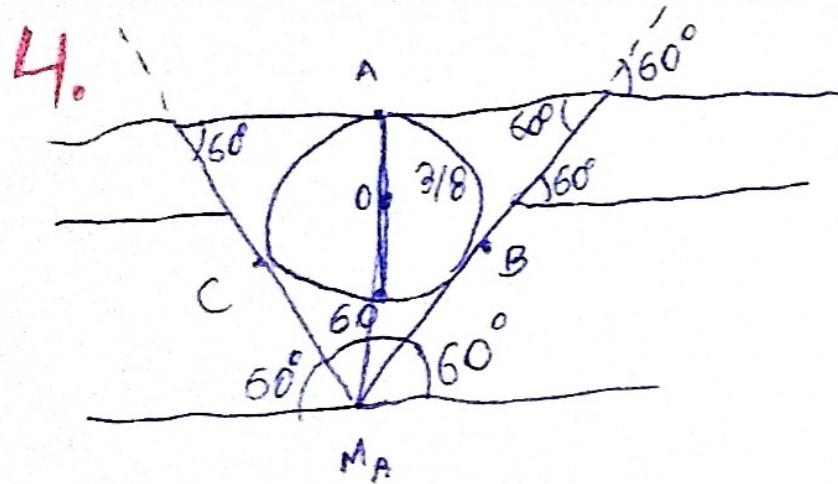
$$\alpha^\circ + 2(x+y) = 180^\circ$$

$$\alpha^\circ + 2(50^\circ) = 180^\circ$$

$$\alpha^\circ = 80^\circ \quad \text{E}$$



É retângulo porque o circuncentro é equidistante dos vértices do triângulo (B)



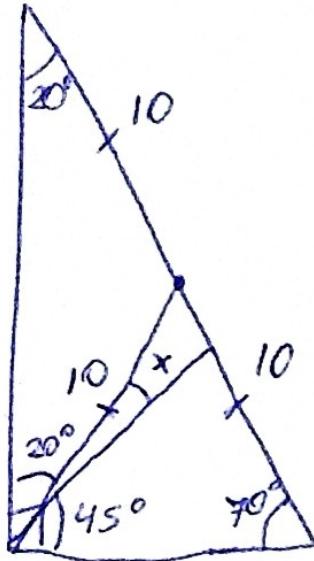
$$\frac{\overline{OM}_A}{\frac{3}{16}} = \frac{2}{1} \Rightarrow \overline{OM}_A = \frac{6}{16}$$

$$x + \frac{1}{2} = \frac{6}{16} + \frac{3}{16} \Rightarrow x + \frac{1}{2} = \frac{9}{16}$$

E

$$x = \frac{9-8}{16} = \frac{1}{16}$$

5.

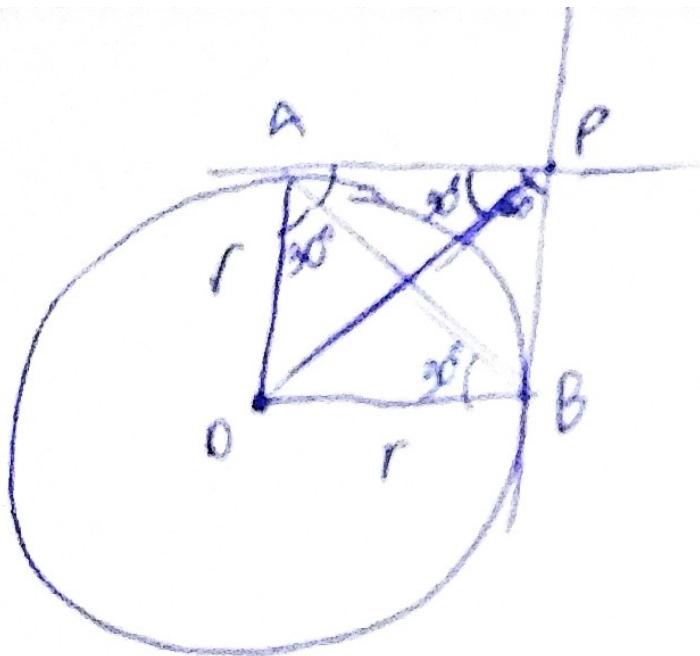


a) $\overbrace{\text{Mede } 10\text{cm}}^{\text{mediana relativa à hipotenusa}} \text{ pois a mediana relativa à hipotenusa é igual a medida da metade da hipotenusa.}$

b) $20^\circ + x^\circ = 45^\circ$

$$x = 25^\circ$$

6.



$$\sin(30) = \frac{1}{2}$$

$$\frac{1}{2} = \frac{r}{\bar{PO}} \Rightarrow \bar{PO} = 2r$$

C