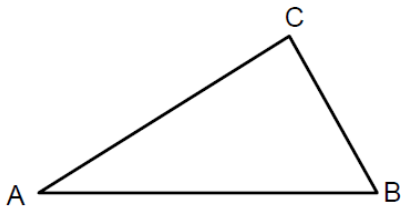


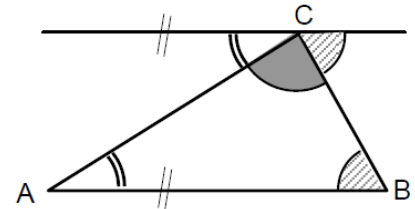
Teorema Angular de Tales



Num triângulo, a soma dos ângulos internos é 180° .

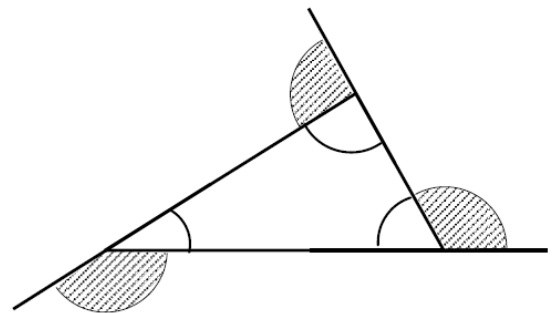
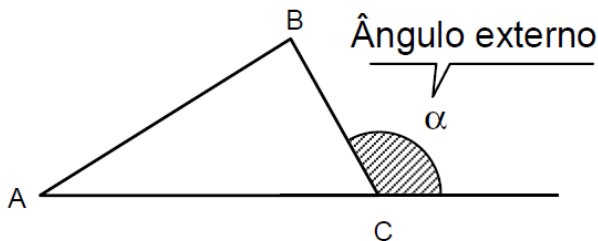
$$A + B + C = 180^\circ$$

Traçando uma reta paralela ao lado AB passando pelo ponto C podemos visualizar essa propriedade.



V – Ângulo externo de um Triângulo

Chamamos de ângulo externo o suplemento do ângulo interno. O triângulo tem 3 ângulos externos.



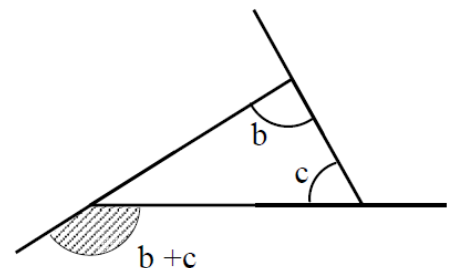
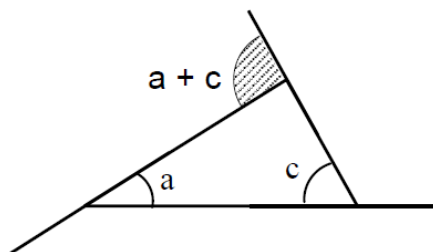
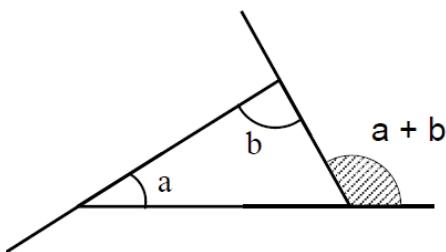
Observe que:

$$\alpha + C = 180^\circ \quad \text{e} \quad A + B + C = 180^\circ$$

$$\text{Então: } \alpha + C = A + B + C \Rightarrow \boxed{\alpha = A + B}$$

Conclusão:

O ângulo externo é sempre a soma dos ângulos internos não adjacentes a ele.

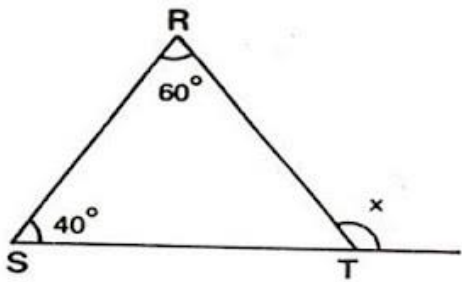


Lembre-se que o ângulo externo é formado por um dos lados e pelo prolongamento de outro.

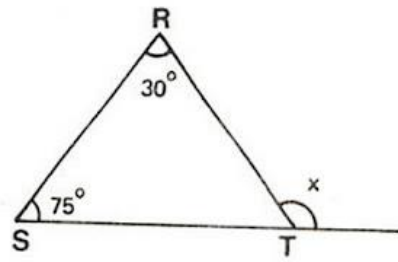
EXERCÍCIOS

1) Determine a medida do ângulo externo indicado em cada triângulo:

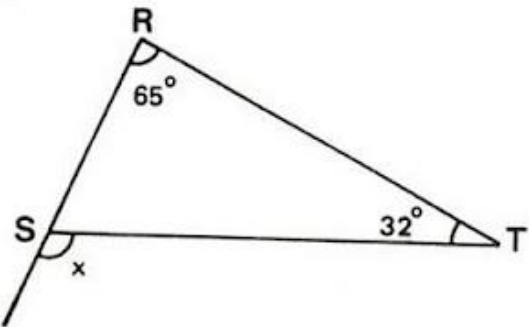
a)



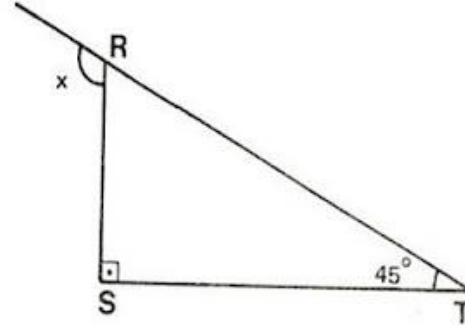
b)



c)

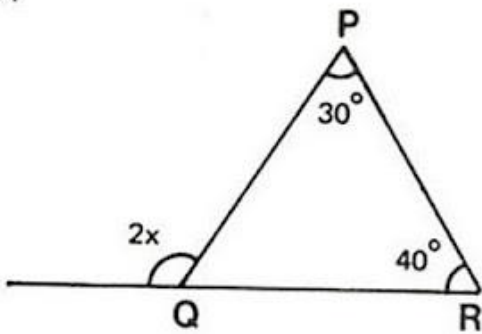


d)

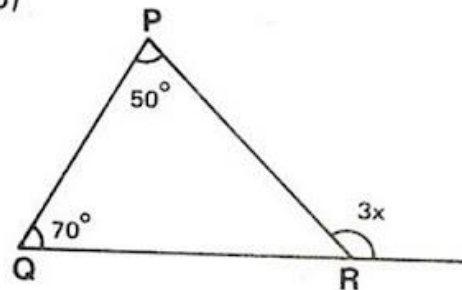


2) Calcule o valor de x nos triângulos dados:

a)

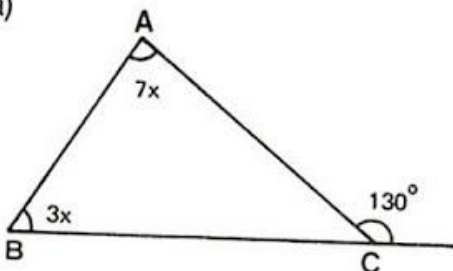


b)

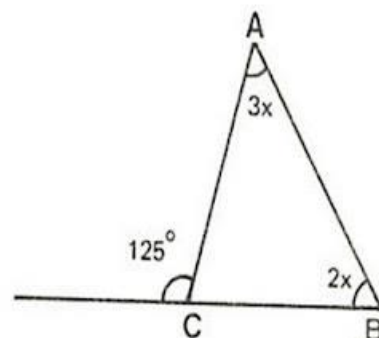


3) Calcule o valor de x nos triângulos dados:

a)

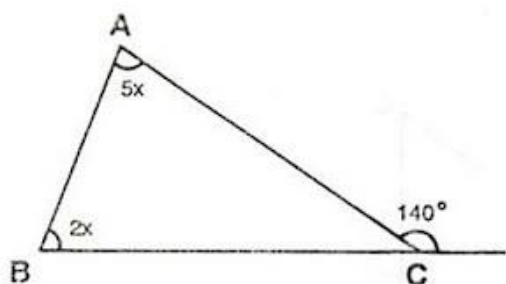


b)

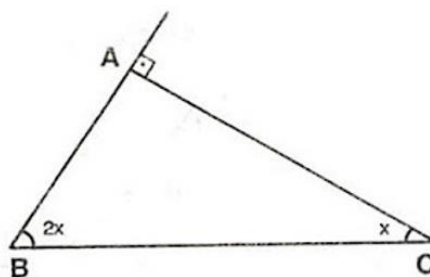


4) Calcule o valor de x nos triângulos dados:

a)

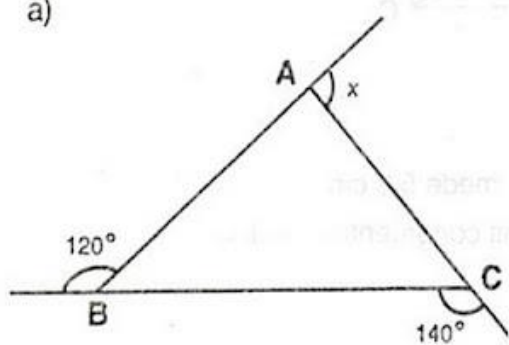


b)

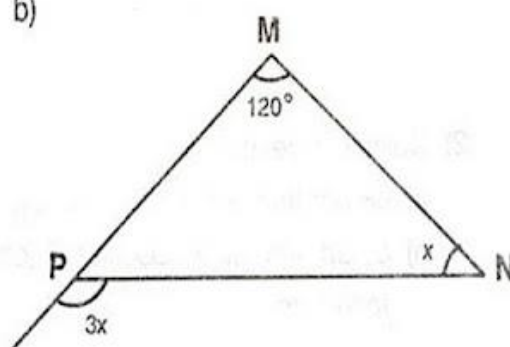


5) Calcule o valor de x :

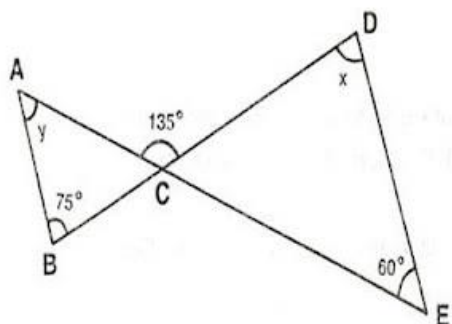
a)



b)

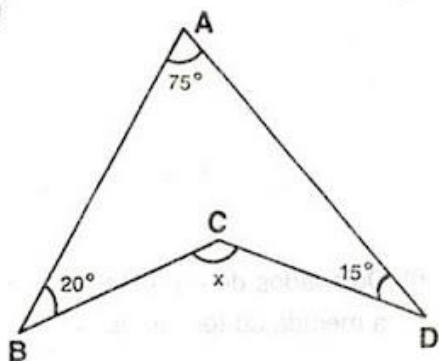


6) Calcule x e y :



7) Calcule x :

b)



a)

