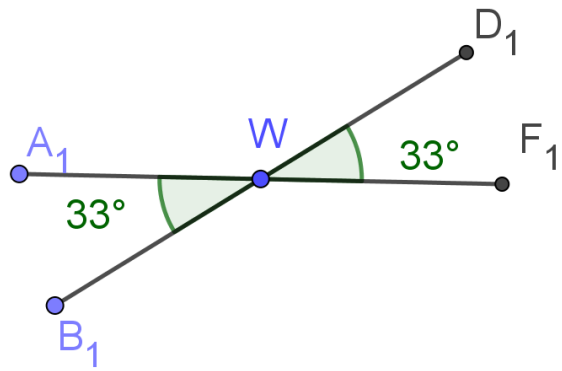




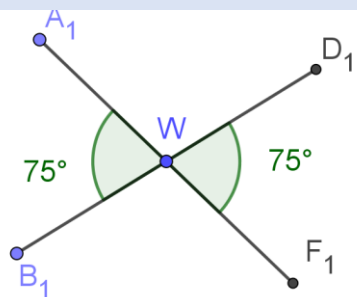
Matemática – 2º série EM (9h20 – 10h50)
Semana 3 – Soma de ângulos

Ângulos no Geogebra

OPOSTO PELO VÉRTICE (OPV)

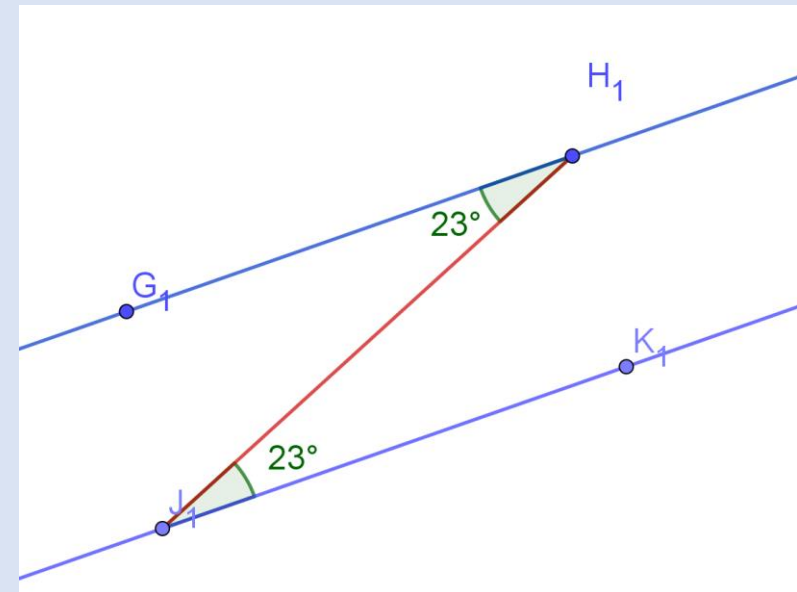


Ângulos Opostos pelo Vértice (OPV)

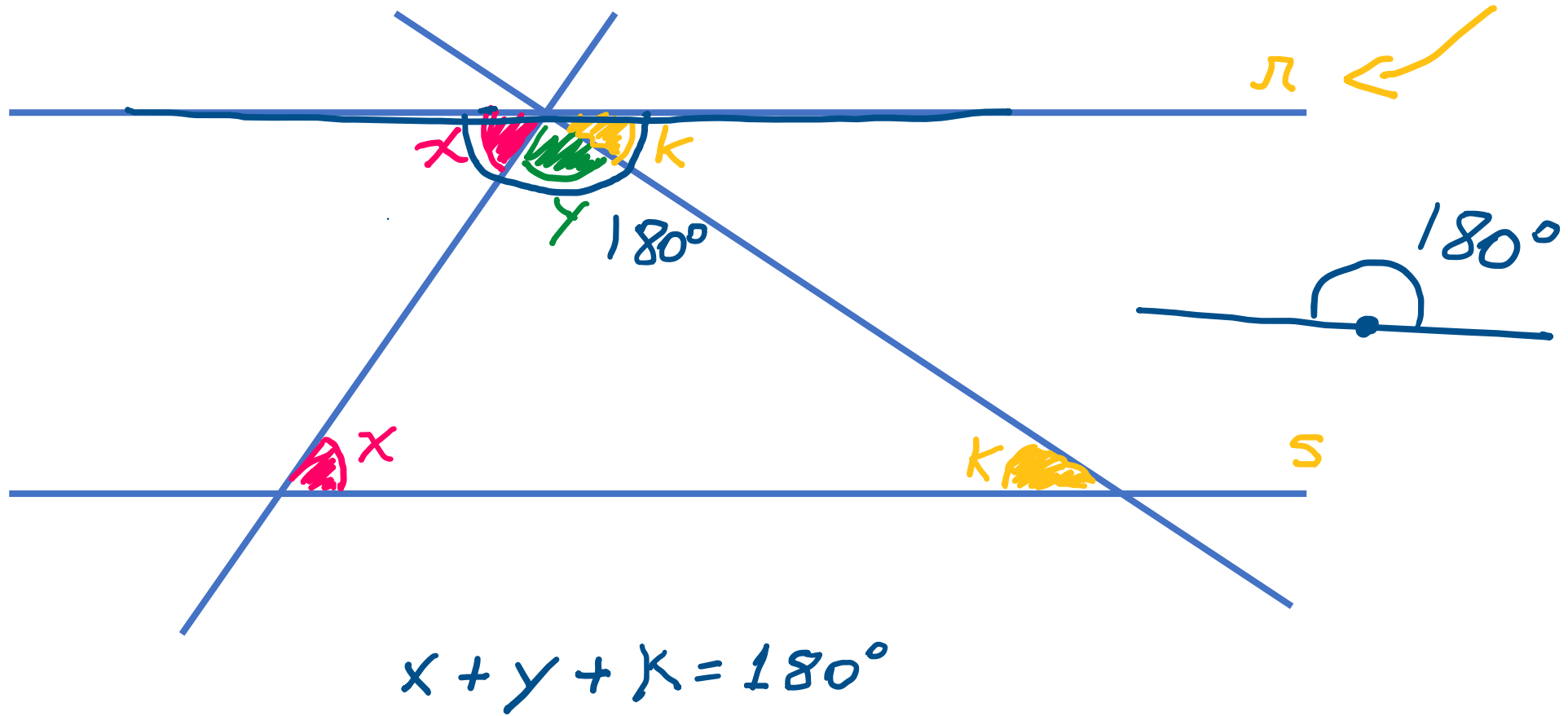


Ângulos Opostos pelo Vértice (OPV)

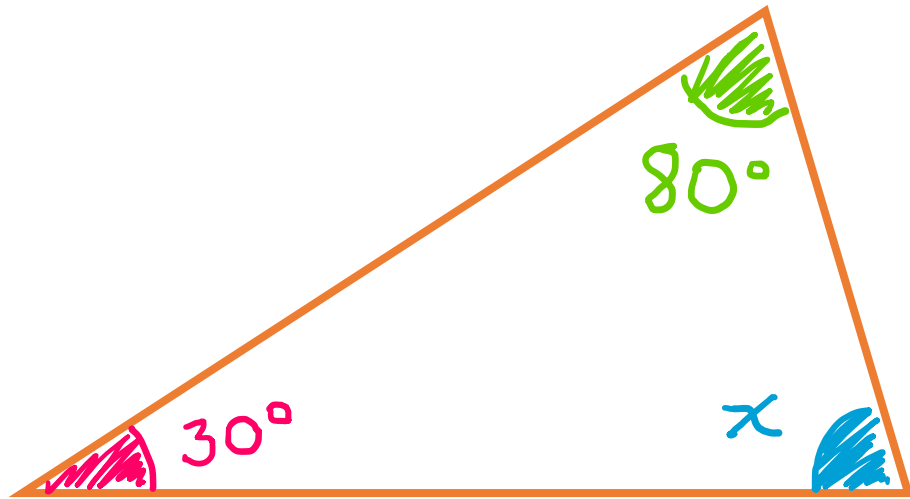
ALTERNOS INTERNOS



Soma dos Ângulos Internos de um Triângulo



Qual é a medida do ângulo x?

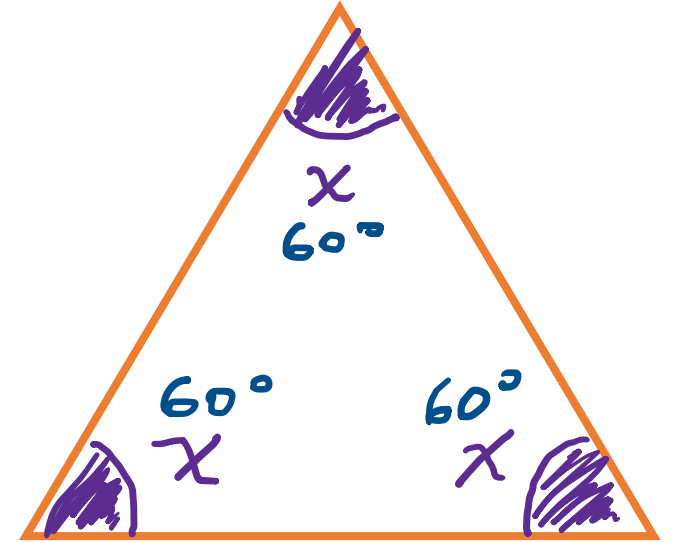


$$30^\circ + 80^\circ = 110^\circ$$

$$180^\circ - 110^\circ = 70^\circ$$

$$x = 70^\circ$$

Triângulo equilátero

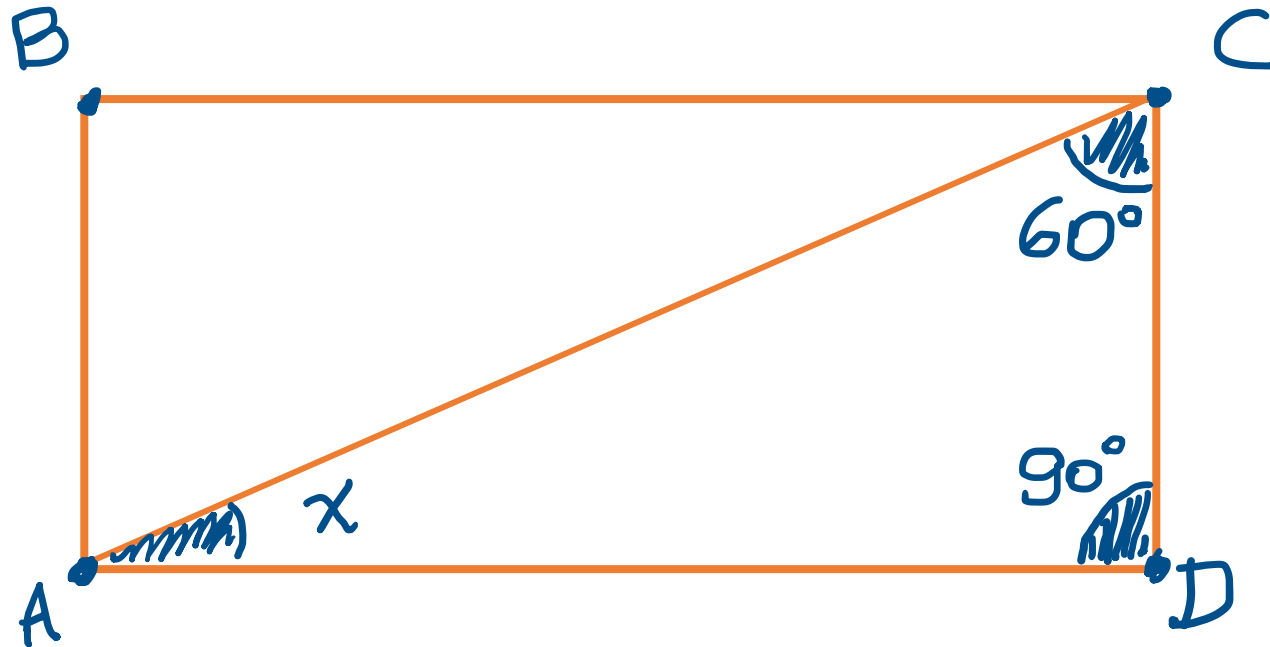


$$x + x + x = 180^\circ$$

$$3 \cdot x = 180^\circ$$

$$x = 60^\circ$$

Qual é a medida do ângulo x?



$\triangle ACD$

Sabendo que ABCD é um retângulo, e AC é diagonal deste retângulo, qual é a medida do ângulo x?

$$\hat{A}DC = 90^\circ$$

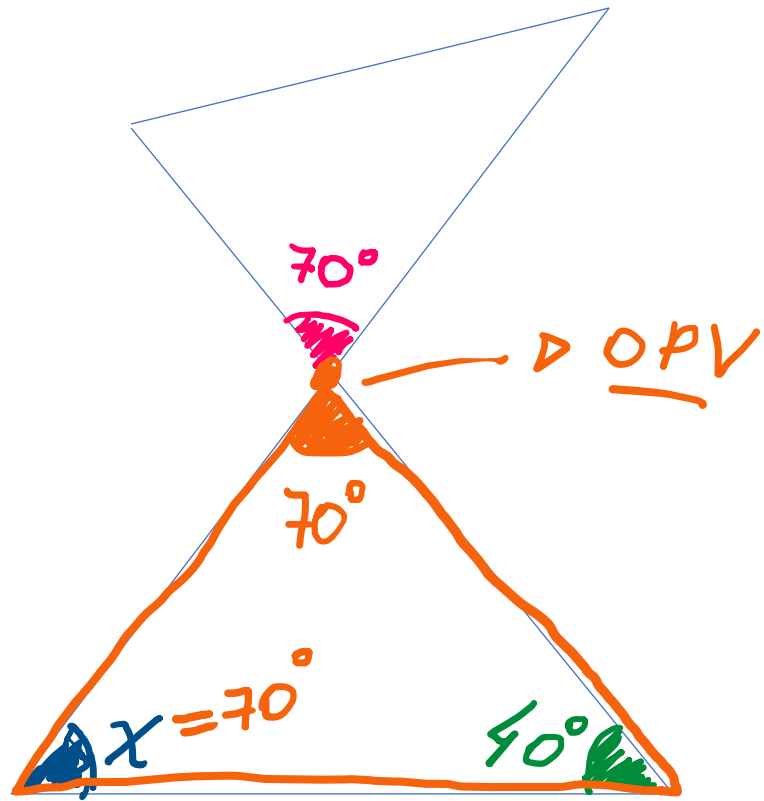
$$60^\circ + 90^\circ + x = 180^\circ$$

$$150^\circ + x = 180^\circ$$

$$x = 30^\circ$$

pr : $150^\circ + 30^\circ = 180^\circ$

Qual é a medida do ângulo x?



$$70^\circ + 40^\circ + x = 180^\circ$$

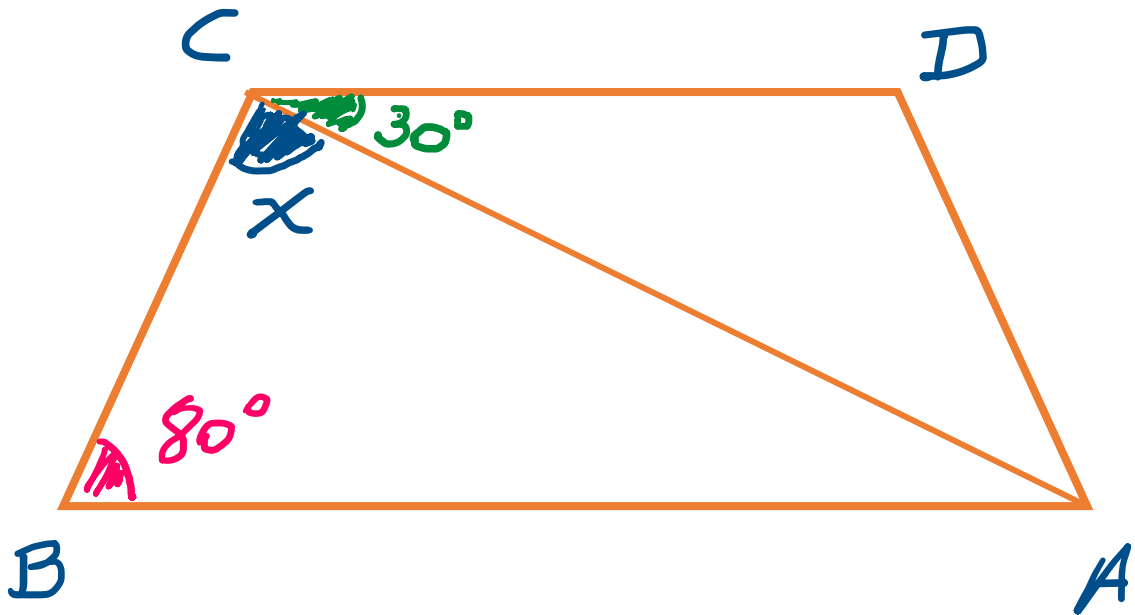
$$110^\circ + x = 180^\circ$$



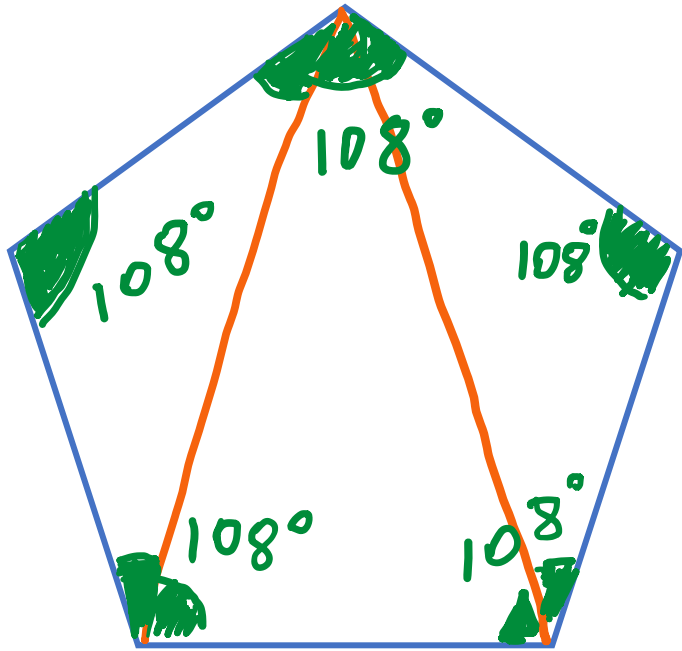
$$70^\circ$$

Qual é a medida do ângulo x ?

Sabendo que ABCD é um trapézio, e AC é diagonal dele, qual é a medida do ângulo x ?

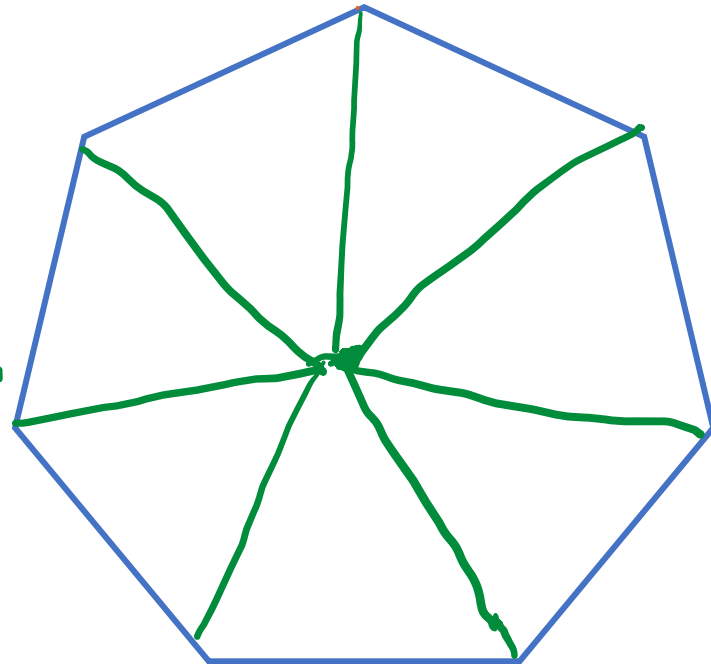


Ângulos internos de um polígono regular



pentágono

$$\begin{array}{r} 2 \\ 180 \\ 180 \\ 180 \\ \hline 540^\circ \\ \begin{array}{l} / 04 \\ / 40 \\ / 0 \end{array} \end{array} \quad \begin{array}{l} \sqrt{5} \\ 108^\circ \end{array}$$



heptágono