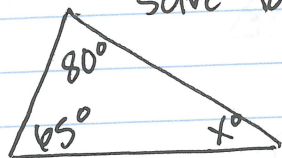


Angle Sum of a Triangle

Triangle sum: The sum of all 3 angles is 180°

Ex.



Solve for x

$$80 + 65 + x = 180$$

$$145 + x = 180$$

$$\begin{array}{r} 145 + x = 180 \\ -145 \quad -145 \\ \hline \end{array}$$

$$x = 35^\circ$$

Ex. $\triangle Y$ has the angle measures below:

$$m\angle Y = 70^\circ \quad m\angle O = (3x - 10)^\circ \quad m\angle U = 7x^\circ$$

$$70 + 3x + -10 + 7x = 180$$

$$\begin{array}{r} 60 + 10x = 180 \\ -60 \quad -60 \\ \hline \end{array}$$

$$\begin{array}{r} 10x = 120 \\ \hline 10 \quad 10 \\ \hline \end{array}$$

$$\boxed{x = 12^\circ}$$