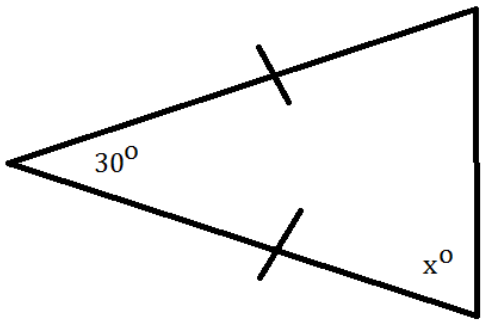
Isosceles Triangle Theorem

Two _____ of a Δ are ≅
if and only if
the two opposite _____ are ≅ .

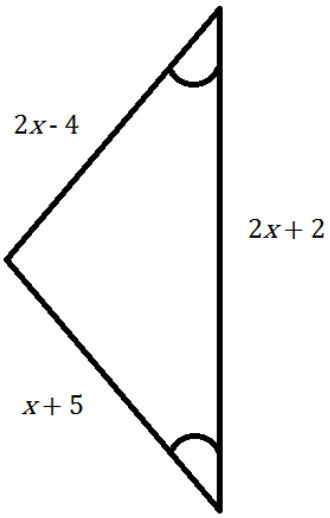
Example 1

Find the value of x. (Hint: What can you put in the diagram because there are two sides already marked as ≅ ?)



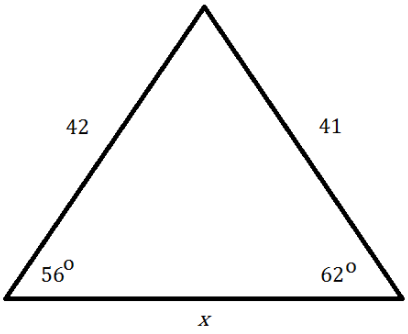
Example 2

Find the value of x. (Hint: What can you put in the diagram because there are two angles already marked as ≅ ?)

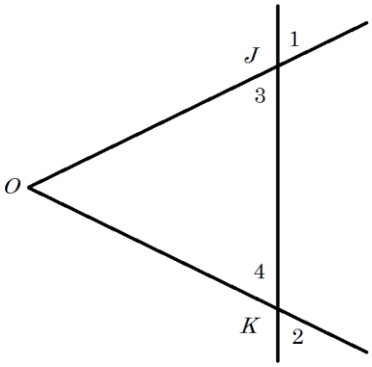


Example 3

Find the value of x. (Hint: What extra information can you calculate based on the diagram ?)



Example 4 – PROOF



Given: $\measuredangle 1 \cong \measuredangle 2$

Prove: $\overline{OK} \cong \overline{OJ}$