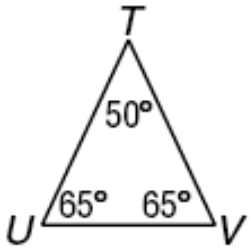
4-1 Classifying Triangles

Parts of a Triangle:

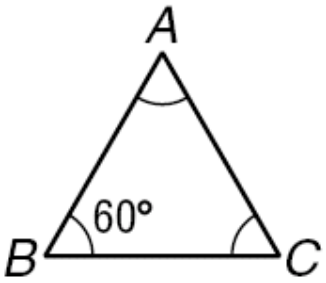
_____ _____ _____

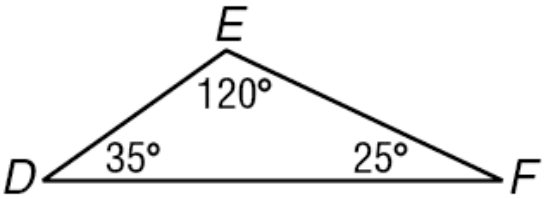


Classify Triangles by angles:

Acute Triangle: all angles are _____ (_____)

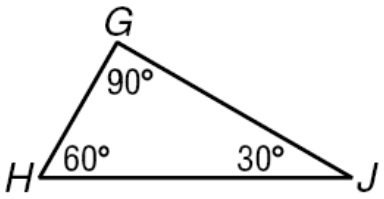
Equiangular: all three angles are _____ **(____)**





Obtuse Triangle: One angle is _____ (_____)

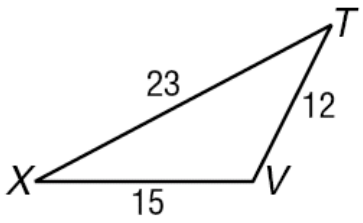
Right Triangle: One angle is _____ (_____)



Classify Triangles by Sides:

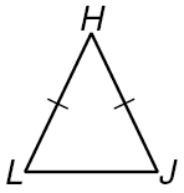
Scalene Triangle: __ _____ sides are _____

(___ ≅ sides)



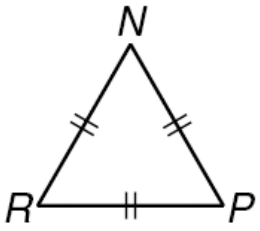
Isosceles Triangle: ____ _____ _____ sides are _____

(__ _____ ____ ≅ sides)

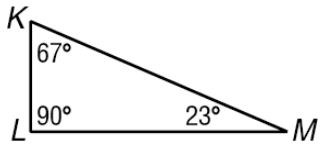


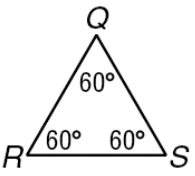
Equilateral Triangle: _____ _____ _____ are _____

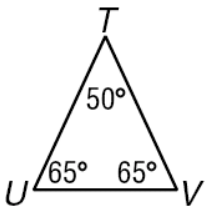
(____ ≅ sides)

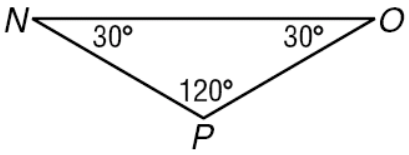


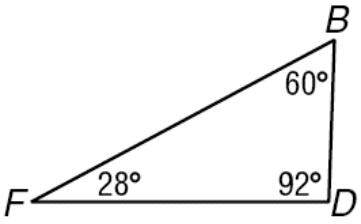
Classify each triangle as *acute*, *equiangular*, *obtuse*, or *right*.

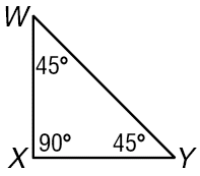




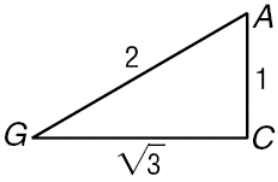


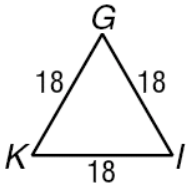


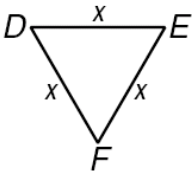


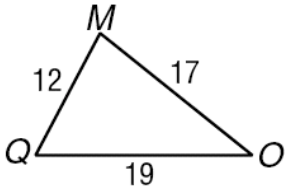


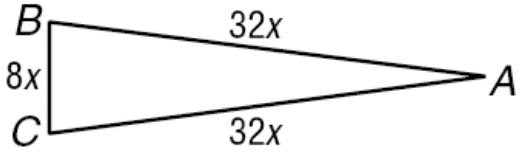
Classify each triangle as *equilateral*, *isosceles*, or *scalene*.

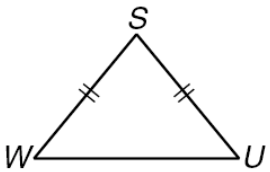










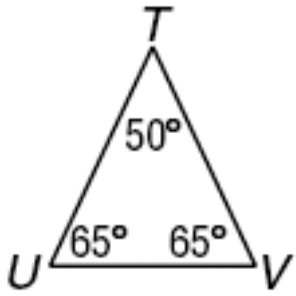


Find the measure of each side of equilateral ΔRST with $RS = 2x + 2$, $ST = 3x$, and $TR = 5x - 4$.

Find the measure of each side of ΔABC with vertices $A(-1, 5)$, $B(6, 1)$, and $C(2, -6)$. Classify the triangle.

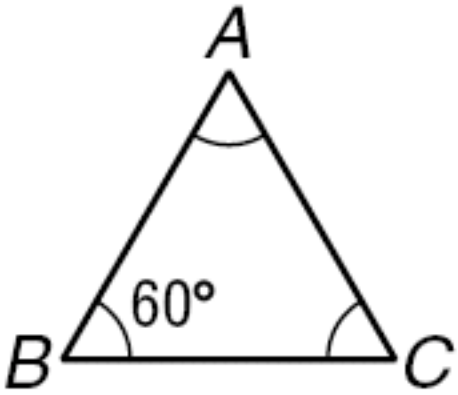
4-1 Classifying Triangles

Parts of a Triangle:
Sides **Vertices** **Angles**

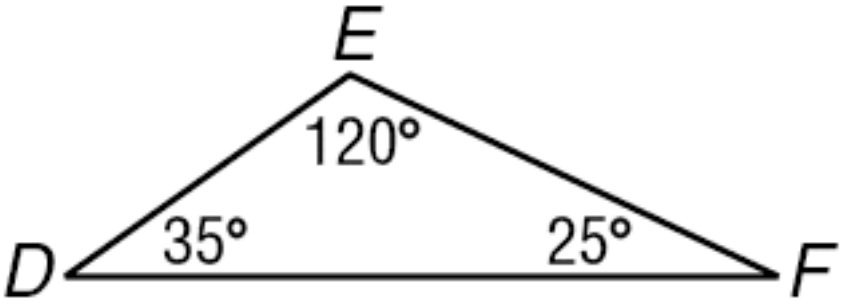


Classify Triangles by angles:

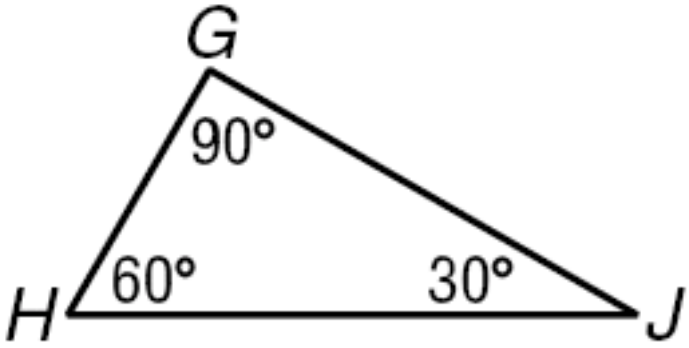
Acute Triangle: all angles are **acute** (**<90º**)
Equiangular: all three angles are **congruent** (**=60˚**)



Obtuse Triangle: One angle is **obtuse** (**>90**)

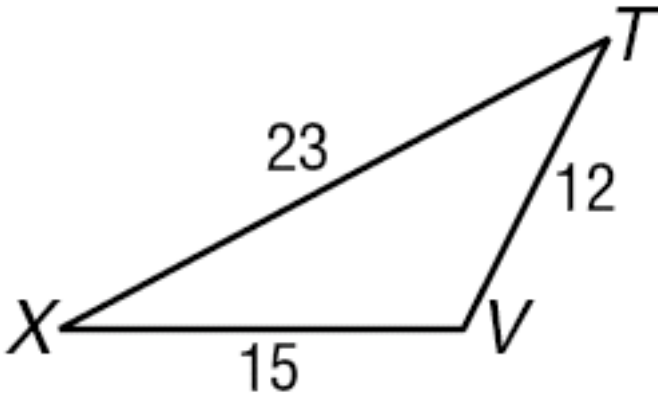


Right Triangle: One angle is **right** (**=90**)

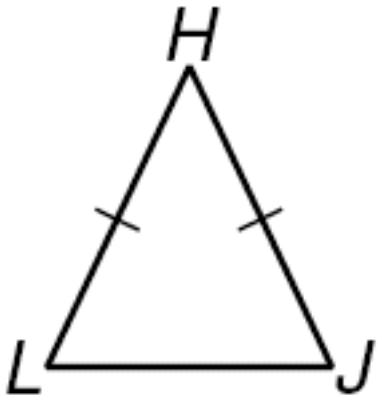


Classify Triangles by Sides:

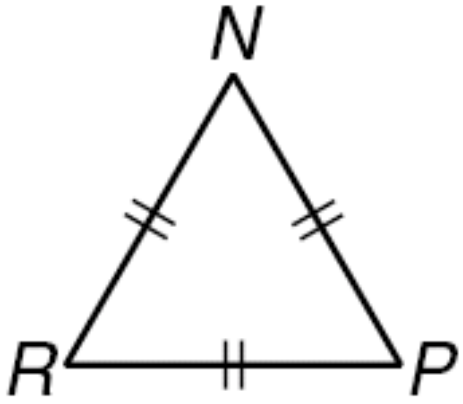
Scalene Triangle: **No two** sides are **congruent** (**0** sides ≅)



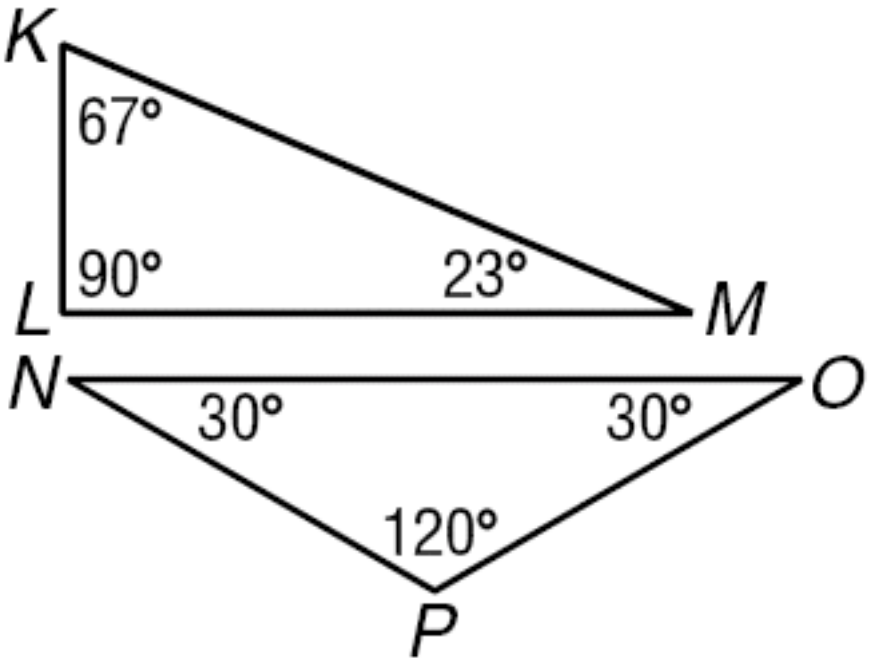
Isosceles Triangle: **at least two** sides are **congruent** (**at least 2** ≅ sides)

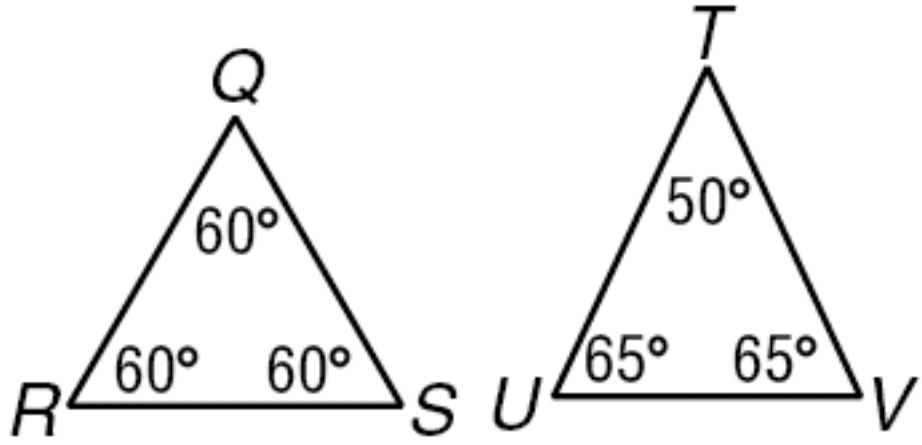


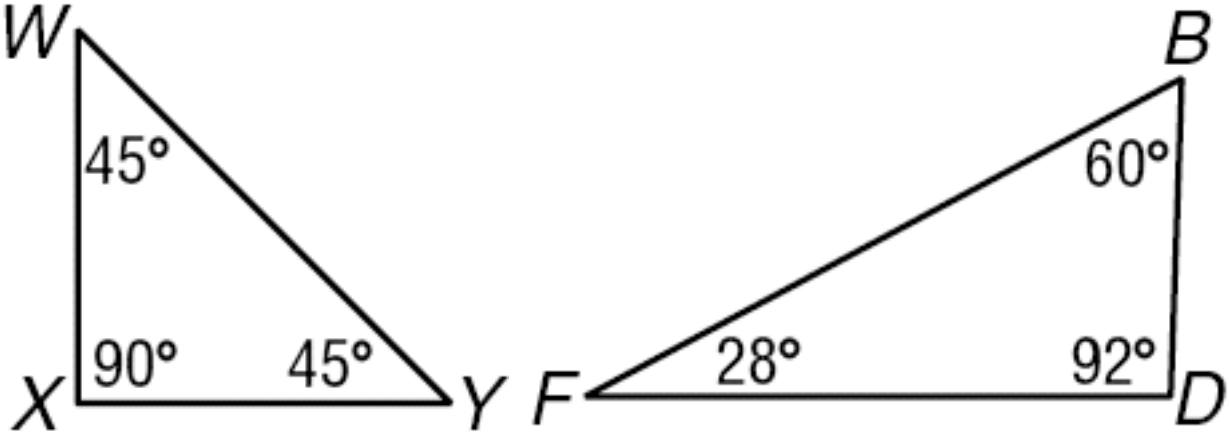
Equilateral Triangle: **All three sides** are **congruent** (**3** sides ≅)



Classify each triangle as *acute*, *equiangular*, *obtuse*, or *right*.







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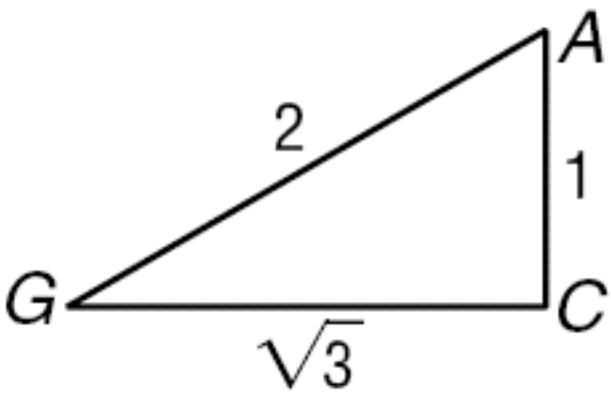

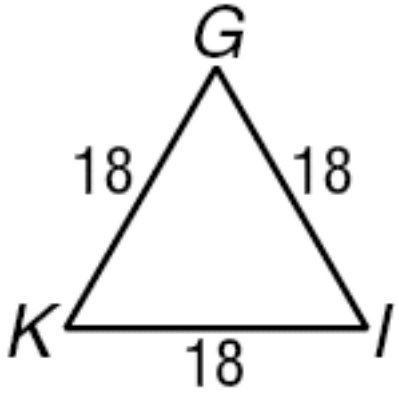

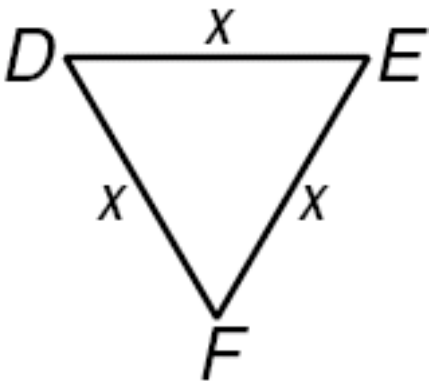

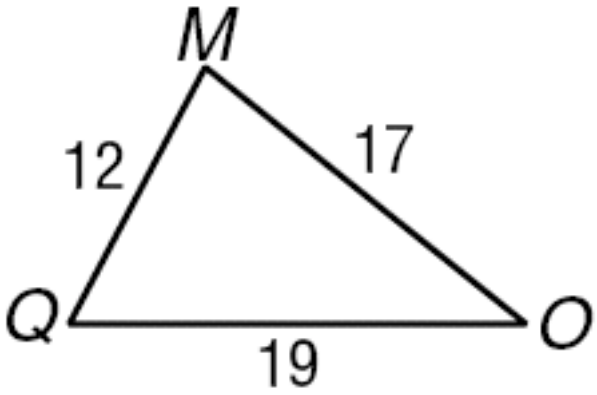

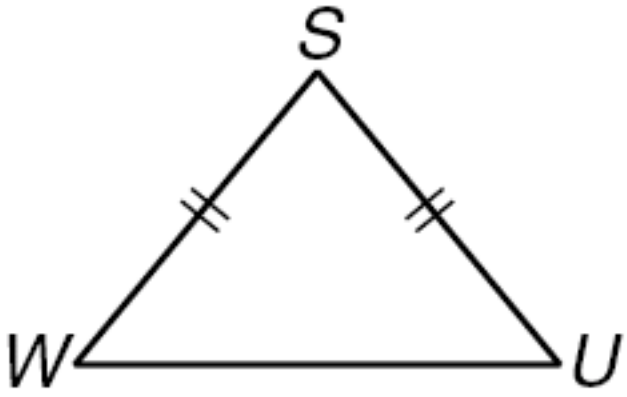

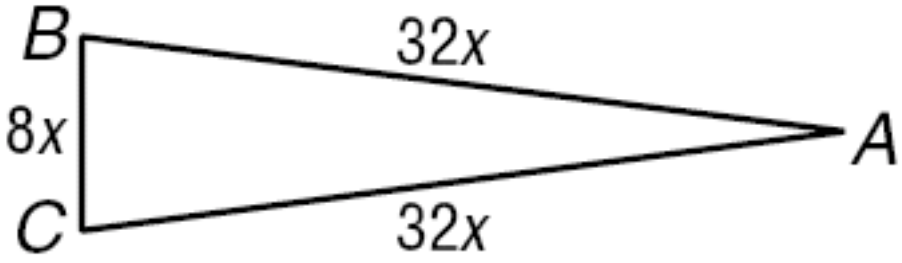

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