



Geometry

Measuring Angles in Triangles

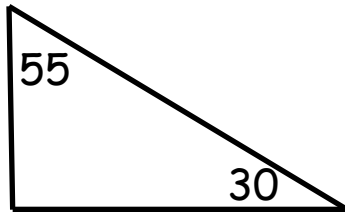


Angle Sum Theorem

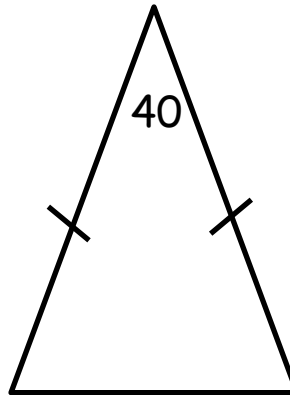
The 3 interior angles of a triangle always add up to 180 degrees.

Find the measurement of the angles of each triangle

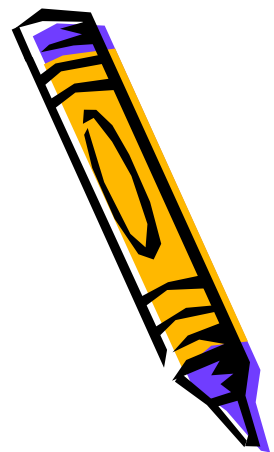
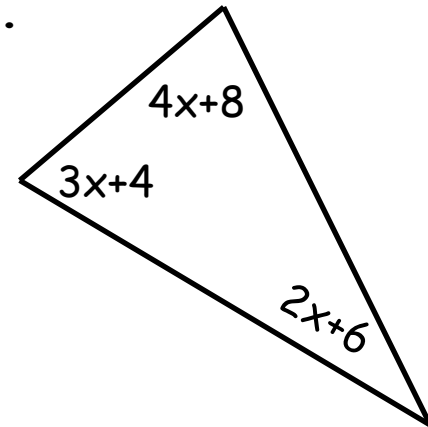
1.



2.

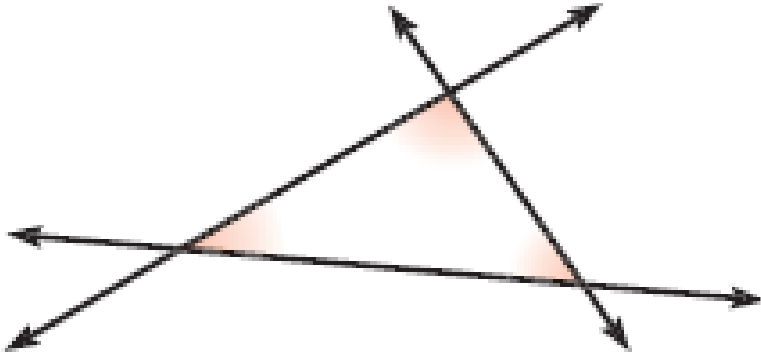


3.

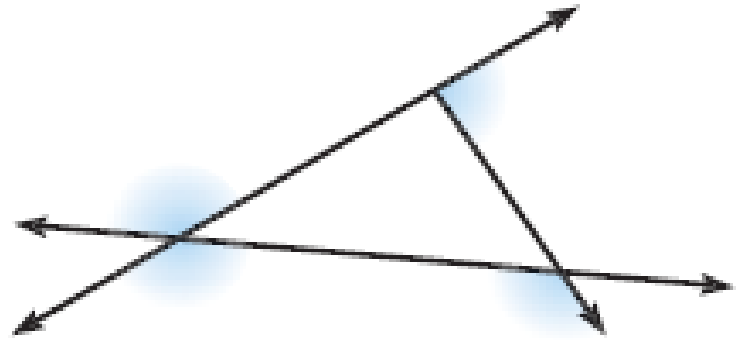


Exterior Angle Theorem

When a side of a polygon is extended exterior angles are formed.



interior angles

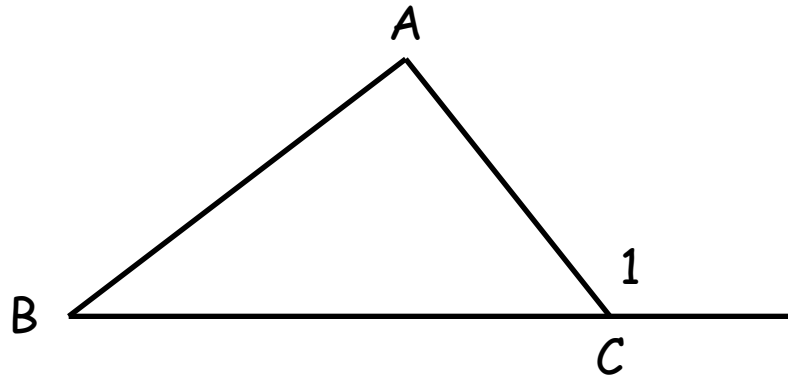


exterior angles

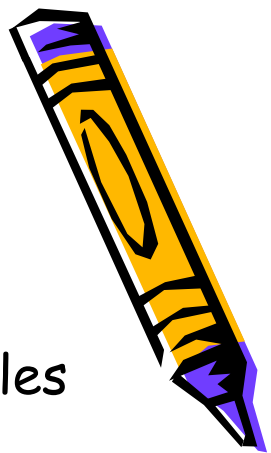


Exterior Angle Theorem

The exterior angle = the sum of the remote interior angles



$$m\angle 1 = m\angle A + m\angle B$$

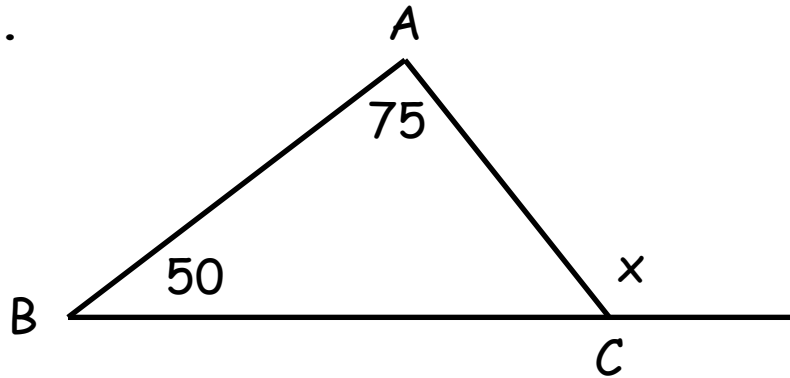


Exterior Angle Theorem

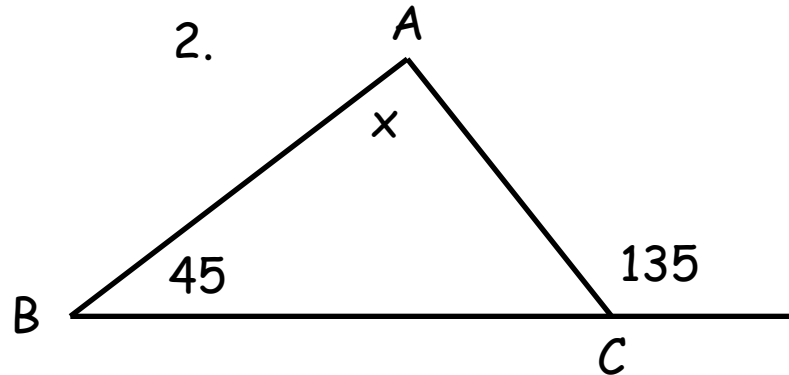
Find x .



1.



2.

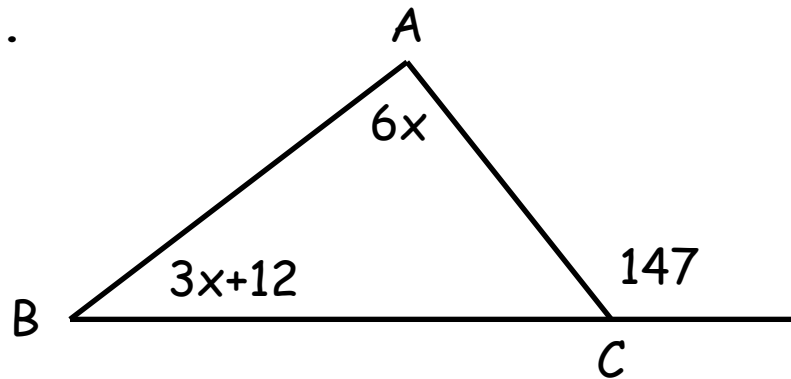


Exterior Angle Theorem

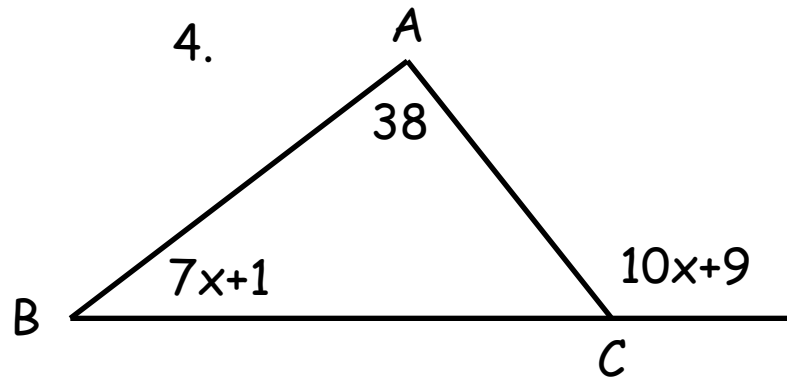
Find x .



3.

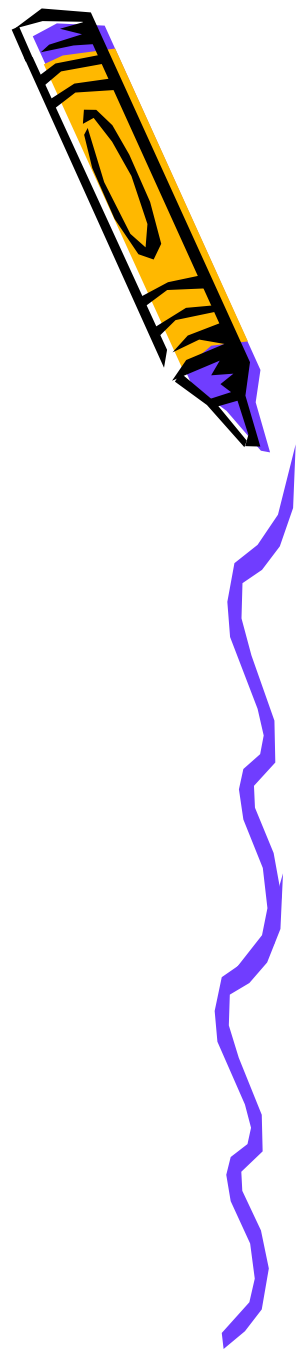


4.



Third Angle Theorem

If 2 angles of a triangle are congruent to 2 angles of another triangle, then the third angles of both triangles are congruent.



Practice

Find the measure of the numbered angle.

