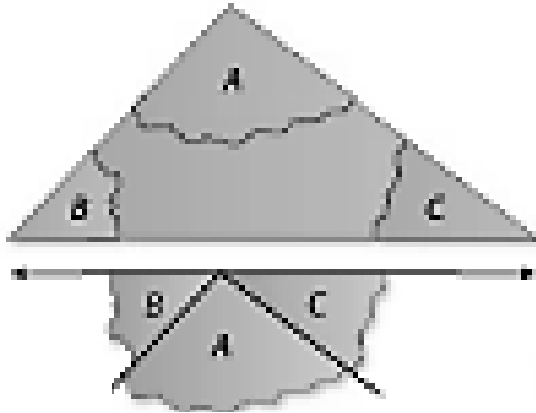


Name:

Date:
Period:

Lesson: Angles of a Triangle (Day 1)

Sum of the Angle Measures in a Triangle



Draw a triangle and cut it out. Label the angles A , B , and C .

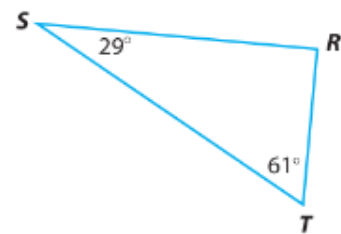
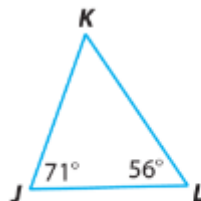
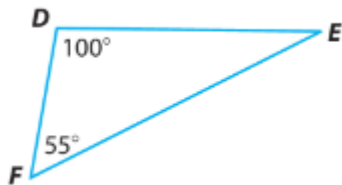
Tear off each "corner" of the triangle. Each corner includes the vertex of one angle of the triangle.

Arrange the vertices of the triangle around a point so that none of your corners overlap and there are no gaps between them.

What do you notice about how the angles fit together around a point?

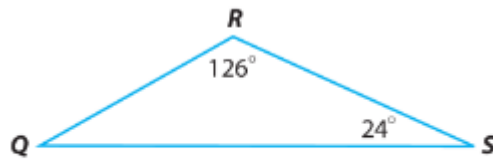
The Triangle Sum Theorem states that for $\triangle ABC$, $m\angle A + m\angle B + m\angle C = \underline{\hspace{2cm}}$.

Find the missing angle measure.



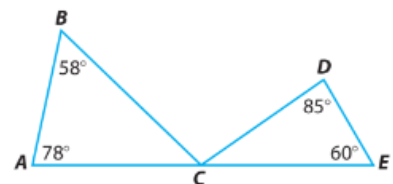
$m\angle K = \underline{\hspace{2cm}}$

$m\angle R = \underline{\hspace{2cm}}$



$m\angle M = \underline{\hspace{2cm}}$

$m\angle Q = \underline{\hspace{2cm}}$

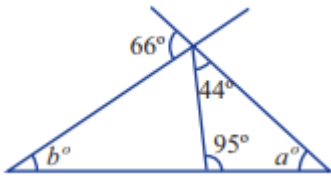


$m\angle ACB = \underline{\hspace{2cm}}$

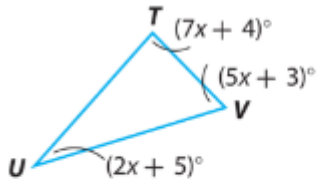
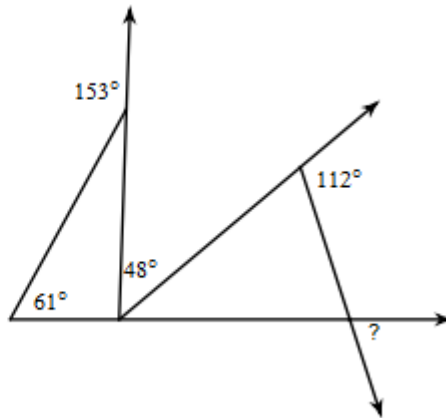
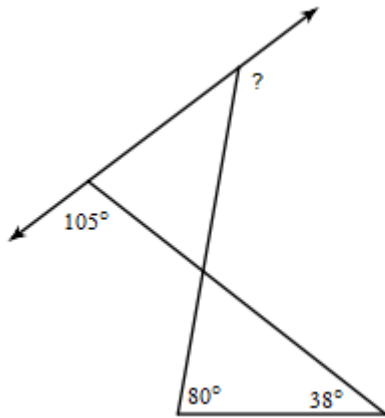
$m\angle BCD = \underline{\hspace{2cm}}$

$m\angle DCE = \underline{\hspace{2cm}}$

Find the values of a and b in the following figure.

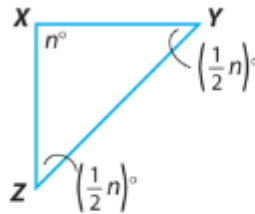


Find the ? in each of the following figures.



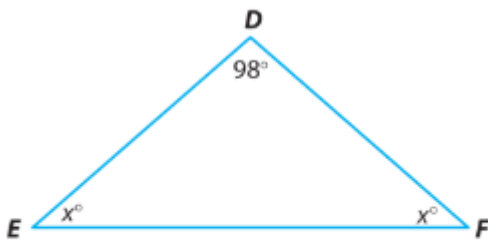
$m\angle T = \underline{\hspace{2cm}}$, $m\angle U = \underline{\hspace{2cm}}$

$m\angle V = \underline{\hspace{2cm}}$



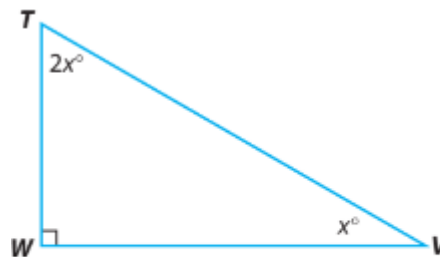
$m\angle X = \underline{\hspace{2cm}}$, $m\angle Y = \underline{\hspace{2cm}}$

$m\angle Z = \underline{\hspace{2cm}}$



$m\angle E = \underline{\hspace{2cm}}$

$m\angle F = \underline{\hspace{2cm}}$



$m\angle T = \underline{\hspace{2cm}}$

$m\angle V = \underline{\hspace{2cm}}$