

Name _____

Period _____

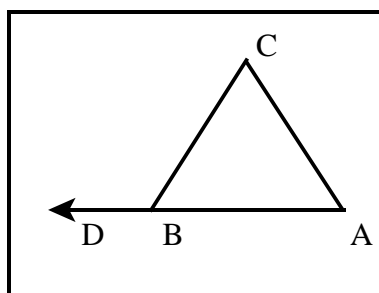
Relationship of Angles of a Triangle

Objective: Investigate the relationship of the angles of a triangle.

NCTM: Standard 1-4, 7

IGO: Geometry 9

1. Construct a triangle and label it $\triangle ABC$.
2. Construct a ray from AB.
3. Label a point D on ray AB outside of $\triangle ABC$.
4. Measure the following for trial 1.



	Trial 1	Trial 2	Trial 3
$m\angle BCA$			
$m\angle CAB$			
$m\angle CBA$			
$m\angle CBD$			
$m\angle BCA+m\angle CAB+m\angle CBA$			
$m\angle BCA+m\angle CAB$			
$m\angle CBD+m\angle CBA$			

5. Make a Conjecture: _____

6. Select point C: Place the pointer on C. Now drag C. Record your answers on Trial 2.
7. Repeat step 6 and record as Trial 3.
8. Is your conjecture true? _____