Problem 1 – Interior angles of a triangle

Press APPS and open the Cabri Jr. application. Follow along with your teacher as instructions for creating the triangle are given.

1. Record the measures of the interior angles of your triangle.

∠ABC	***∠BCA***	***∠CAB***

2. What is the sum of the measures of the three interior angles of the triangle?

3. Does this result change when a vertex of the triangle is dragged?

Save your file as *INTANGLE*.

Problem 2 – One exterior angle of a triangle

4. Record the measures of the interior angles and exterior angle ∠*BCD* of your triangle.

∠ABC	***∠BCA***	***∠CAB***	***∠BCD***

5. Make some observations about the exterior angle ∠*BCD* and its relationship to other angles in the chart.

Before beginning the third part of the activity as instructed by your teacher, save the current file as *EXTANGLE* using the SaveAs option.

Problem 3 – Three exterior angles of a triangle

6. List the measures of the exterior angles of your triangle (one at each vertex).

Exterior ∠ at vertex *A*	Exterior ∠ at vertex *B*	Exterior ∠ at vertex *C*

7. Calculate the sum of the three exterior angles.

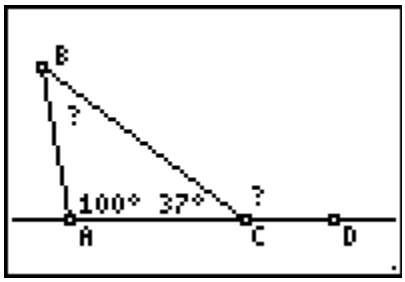
8. Why do you think it is important to use one exterior angle at each vertex?

Before beginning the exercises, save the current file as *EXTANG3* using the SaveAs option.

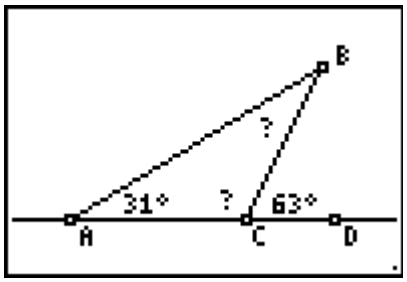
Exercises

Find the missing angle measures in each of the diagrams below.

1.



2.



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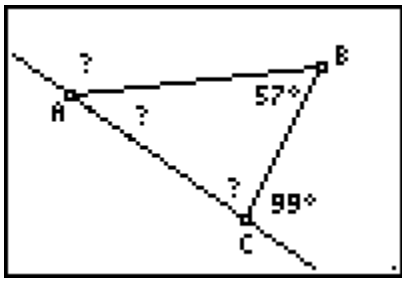
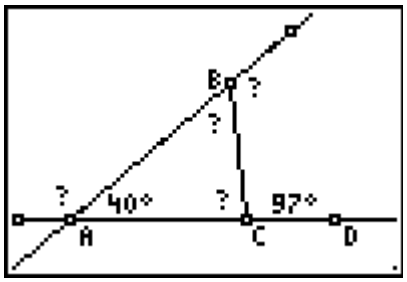
4.