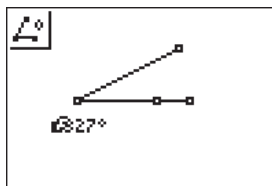# Drawing and Measuring an Angle

Approximate Total Time: 25 minutes

ACTIVITY OVERVIEW:

In this activity we will

- Draw an angle
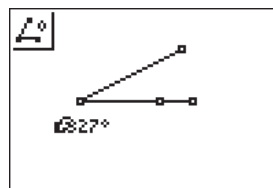- Find the measure of the angle
- Change the angle

We can use our knowledge of naming angles as we learn about measuring angles with the measurement tool. We can also review classifying angles as we change the angle measure to obtain acute, right, or obtuse angles.

NCTM Geometry Standard: Analyze characteristics and properties of 2- and 3-dimensional geometric shapes and develop mathematical arguments about geometric relationships.
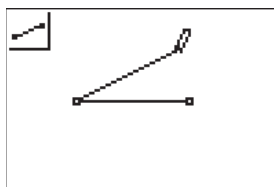

1

Press APPS. Move down to the CabriJr APP and press ENTER. Press ENTER, or any key, to begin using the application. Press Y= for the F1 menu and select **New**. (If asked to **Save changes?** press ◄ ENTER to choose "No.")

2

Press WINDOW for the F2, move to **Segment**, and press ENTER**.** Move to the right and mark an endpoint by pressing ENTER. Now move left and mark another endpoint by pressing ENTER again. This point will be the vertex of the angle so press ENTER to start a new segment with the same endpoint. Move up and right to end the segment with ENTER. You should have two segments with a common endpoint.

3

Press GRAPH for F5 and move to **Measure** and **Angle.** Press ENTER. You will now select 3 points to determine the angle. As in naming angles, the second point selected is the vertex of the angle.

For TI-Navigator™ Users

Use Quick Poll to review naming & measuring angles (e.g. What is the vertex of angle ABC? Give the measure of an angle which is obtuse.). For help, see page 59.
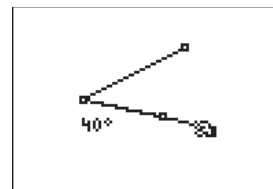

4

Move to last endpoint you marked, and when it is flashing, press ENTER to choose that point. Move until the vertex of the angle is flashing and press ENTER. The third point defining the angle to be measured can be any point along the other side of the angle (or the endpoint of the segment). Press ENTER to select the third point. The angle measure will appear with the *hand*. Move it to a convenient location away from the angle. Press CLEAR to turn off the *hand*. Press CLEAR again to exit the angle measure tool.

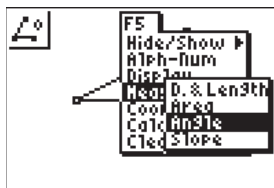### 5

Move the pointer to an endpoint of one of the sides. Press ALPHA to activate the hand. Use ▲ ▼ to change the angle measure.

6

To exit the APP, press Y= for the F1 menu. Move to **Quit**, then press ENTER. (Or you can press 2nd MODE for [QUIT].)