Measuring Angles in a Quadrilateral

Student Activity

Name _____

Class _____

Step 1: Press apps. Move down to the *Cabri^TM Jr.* application and press enter. Press enter, or any key, to begin using the application.

Step 2: Press y= for the **F1** menu and select **New**. (If asked to **Save changes?** press ▼ enter to choose "No.")

Step 3: Press window for **F2**, move down to **Quad.**, and press enter to select **Quad**. Move to the location of a vertex and press enter. Continue for the remaining three vertices. Press clear to exit the quadrilateral drawing tool.

Step 4: Press graph and move down to **Measure**. Move right and down to **Angle** and press enter. To measure an interior angle, you will select three points, where the second point is the vertex of the angle. The other points can be a vertex of the quadrilateral or a point on the side. Select a vertex or side adjacent to the angle to be measured, then the vertex of the angle to be measured, and then a vertex or adjacent side on the other side of the angle to be measured.

Press + to display the angle measurement rounded to the nearest tenth. Use the arrow keys to move the measurement to a convenient location. Press alpha to deactivate the hand. Measure all of the interior angles of your quadrilateral.

1. Sketch your quadrilateral below. Record the interior angle measurements.

2. Find the sum of the angles.

Step 5: Move the arrow until one of the vertices of the quadrilateral is flashing and press alpha to activate the hand. Use the arrow keys to move the vertex to form a new quadrilateral.

3. Record the measures of the four angles after moving a vertex. Find the sum of the angles.

Step 6: Press ⌨alpha to deactivate the hand and move the pointer to a different vertex. Press ⌨alpha to activate the hand and move another vertex to a new location.

4. Record the measures of the four angles. Find the sum of the angles.

5. Make a conjecture: The sum of the interior angles of a quadrilateral is _____.