Tangents to a Circle Investigation Geometry Mrs. Ledford

Step 1: Open Geogebra and hide the axes with the  button.

Step 2: Use the circle button  to create circle c with center A and point B on the circle. (It does not matter where the points are, or what size your circle is.)

Step 3: Use the line button  to create a line between A and B.

Step 4: Use the tangent button  to create a tangent line through B to circle c.

Step 5: Use the point button  to place point C on this new tangent line.

Step 6: Use the angle button  to create angle CBA.

What is the degree measure of angle CBA? _____

Step 7: Click and hold point B and move it around the circle, and make the circle larger and smaller.

What do you notice about the degree measure of angle CBA? _____

Compare your results with the results of others near you. Your next conjecture could be:

A tangent to a circle is _____ to the radius (or diameter) drawn to the point of tangency.