

**Step 1:** Open GeoGebra and hide the axes.

**Step 2:** Create a circle with center A and side point B.

**Step 3:** Place points C and D on the opposite side of the circle from B in a counter clock-wise direction.

**Step 4:** Create segments CB and DB.

**Step 5:** Draw angle CBD (an inscribed angle).

**Step 6:** Place point E on the circle in a clock-wise direction from point B.

**Step 7:** Create segments CE and DE.

**Step 8:** Draw angle CED (another inscribed angle, intercepting the same arc as the first.)

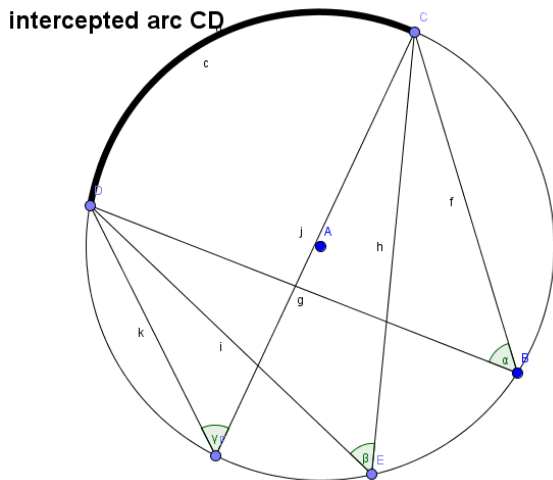
What do you notice about these two inscribed angles? \_\_\_\_\_

**Step 9:** Place point F on the circle in a clock-wise direction from point E.

**Step 10:** Create segments CF and DF.

**Step 11:** Draw angle CFD (a third inscribed angle, intercepting the same arc as the first 2.)

Your construction should look similar to this:



What do you notice about the measure of all 3 inscribed angles? \_\_\_\_\_

Move point B, E, or F around, without crossing onto the common intercepted arc. What do you notice about all 3 angles? \_\_\_\_\_

Compare your results with the results of others near you.

Your next conjecture could be:

**Inscribed angles that intercept the same arc are \_\_\_\_\_.**