


**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 anywhere on the circle.

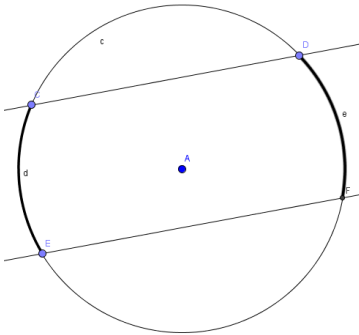
**Step 4:** Create line CD.

**Step 5:** Create a point E on the circle

**Step 6:** Using the parallel line button  to create a line parallel to line CD through point E.

**Step 7:** Use the intersect button  to create point F on the parallel line through point E and the circle.

**Step 8:** Now create 2 circular arcs: one with center A from point C to E, the other with center A from point D to F. Your construction should now look like this:



What do you notice about the measure of the arcs  $e$  and  $d$ ? \_\_\_\_\_

Move the points E, C, or D around. What do you notice about  $e$  and  $d$  now?

Compare your results with the results of others near you.

Your next conjecture could be: **Parallel lines intercept \_\_\_\_\_ arcs on a circle.**