Step 1: Open GeoGebra and hide the axes.
Step 2: Create a line between points $A$ and $B$.
Step 3: Use the point on object button $t$ to create a point C anywhere on the circle.
Step 4: Create a line between points $A$ and $C$.


Step 5: Use the intersect button to create points D and E.


Step 6: Create angle BAC and DAE. What do you notice about their measures? $\qquad$
If you move points $\mathrm{A}, \mathrm{B}$, or C around, what happens to the central angles? $\qquad$

Compare your results with the results of those near you. Write a conjecture about the measure of central angles.

Step 7: Use the circular arc button $\boxed{\square}$ to create an $\operatorname{arc} d$, from center $A$, and points $B$ and $C$.


Step 8: Create an arce, between points D and E.
Compare the length of arcs $d$ and $e$. What do you notice? $\qquad$
If you move around points $A, B$, or $C$, what happens to the length of arc $d$ and arc $e$ ?

Compare your results with the results of those near you. Write a conjecture about the lengths of intercepted arcs.

