TI-Nspire Student Worksheet for G.G. 49 the relative lengths of chords as compared to their distance from the center of the circle



- 1.) Select, grab and drag point A or point B. What happens to the length of OX as the length of AB increases?
- 2.) Select, grab and drag point A or point B. What happens to the length of OX as the length of AB decreases?
- 3.) Select, grab and drag point C or point D. What happens to the length of OY as the length of CD increases?

- 4.) Select, grab and drag point C or point D. What happens to the length of OY as the length of CD decreases?
- 5.) In circle O chords PQ and RS are drawn and chord PQ is closer to point O than chord RS. What can you conclude about the lengths of O chord PQ and chord RS?

6.) What is the longest chord in a circle?

7.) How far from the center is the longest chord you can draw in a circle?