
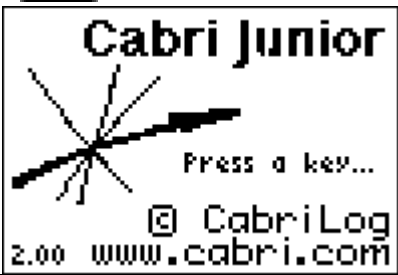

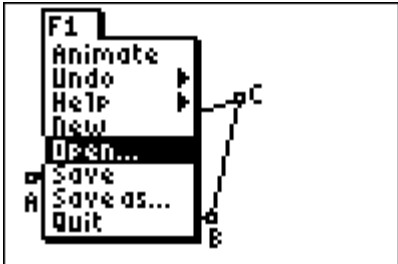
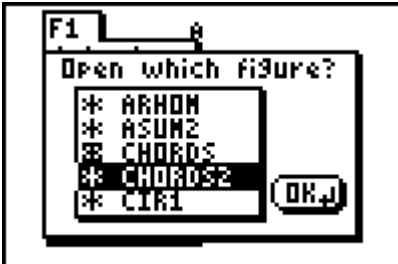
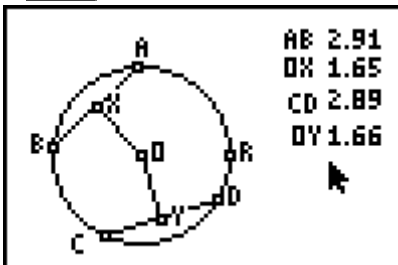


TI-84+ Student Worksheet for G.G. 49 [the relative lengths of chords as compared to their distance from the center of the circle](#)

<p>After turning on your handheld press</p> <p>APPS</p> 	<p>Select CabriJr.</p> <p>5</p> 								
<p>Y=  scroll down to Open</p> 	<p>ENTER scroll to CHORDS2</p> 								
<p>ENTER</p>  <table border="1" data-bbox="511 1144 625 1291"> <tr> <td>AB</td> <td>2.91</td> </tr> <tr> <td>OX</td> <td>1.65</td> </tr> <tr> <td>CD</td> <td>2.89</td> </tr> <tr> <td>OY</td> <td>1.66</td> </tr> </table>	AB	2.91	OX	1.65	CD	2.89	OY	1.66	<p>OX is the distance from the center to chord AB</p> <p>OY is the distance from the center to chord CD</p>
AB	2.91								
OX	1.65								
CD	2.89								
OY	1.66								

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?
