

Tangent Lines and the Chord-Bisector Theorem

Both theorems today come from the same underlying fact. Track that fact as you write — by the end you should be able to say what it is and how each proof uses it.

CHORD-BISECTOR THEOREM — statement, diagram, and proof

Statement — in your own words:	<i>Sketch</i>
Conditional form:	

Proof — in your own words: Which Unit 4 theorem did the proof use? _____

RADIUS-TANGENT THEOREM — statement, diagram, and proof

Statement — in your own words:	<i>Sketch —</i>
Conditional form:	

Proof — in your own words.

CONSTRUCTION — *finding the center from a fragment*

Describe the steps — given a fragment of a circular rim with no center marked:

- 1.
- 2.
- 3.

Why two chords (not just one)?

THE UNIFYING IDEA — *what connects both theorems and several others*

Both theorems today come from a single fact about circles. What is that fact? Write it as a 'big idea' statement in your own words.

How does this connect back to Lesson 8.1?