## Unit 7 Lesson 2: Inscribed Angles

### 1 Notice and Wonder: A New Angle (Warm up)

#### Student Task Statement

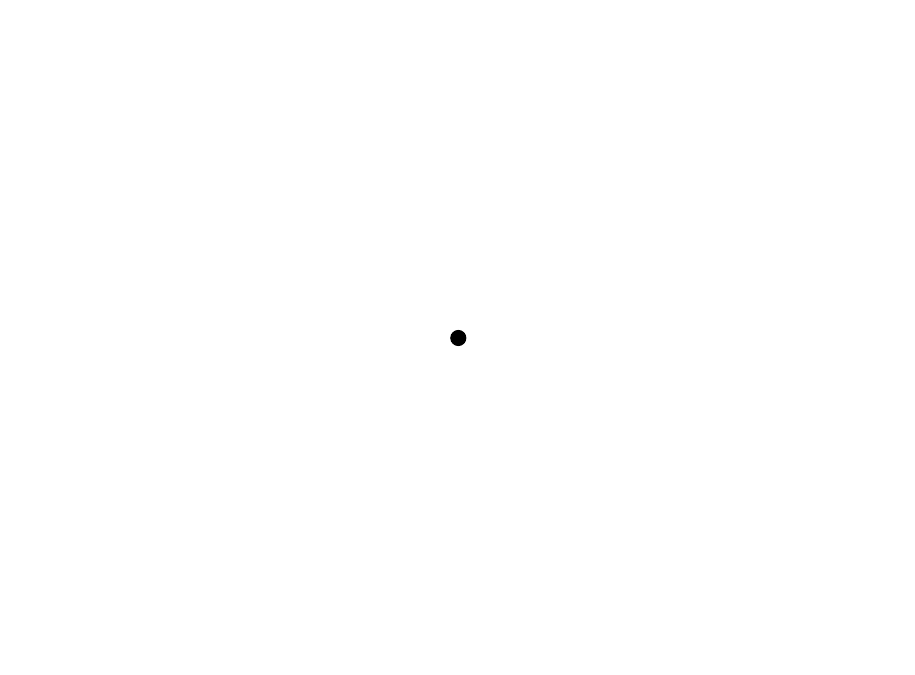
What do you notice? What do you wonder?



### 2 A Central Relationship

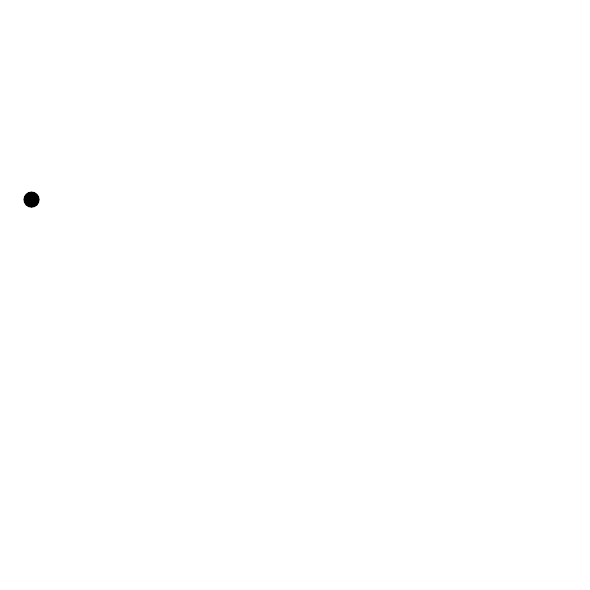
#### Student Task Statement

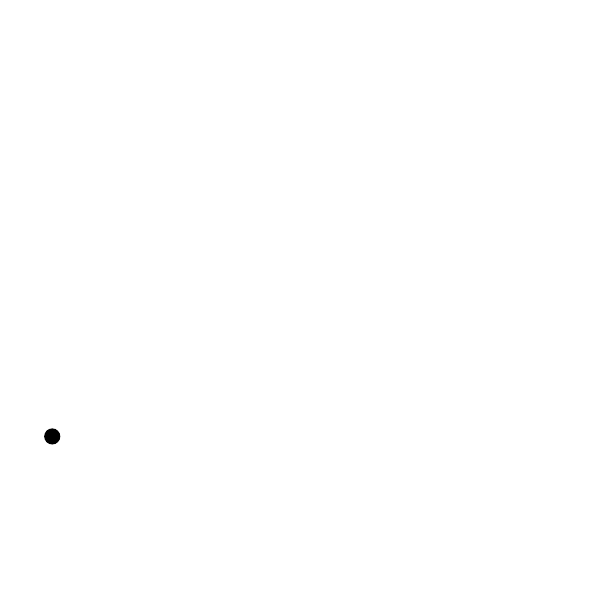
Here is a circle with central angle .

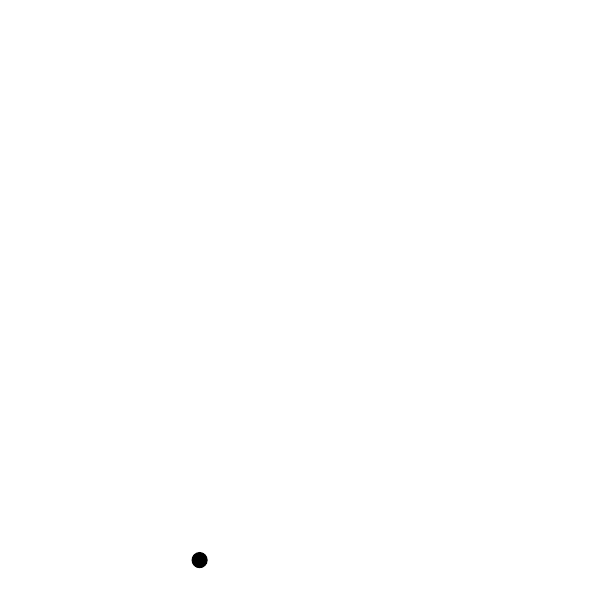


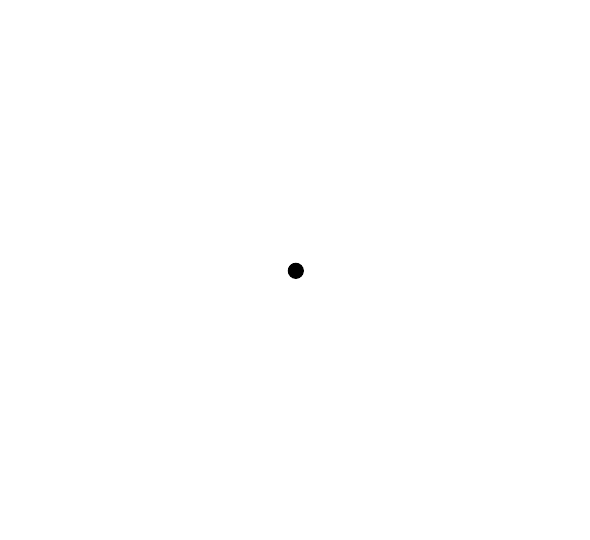
1. Use a protractor to find the approximate degree measure of angle .
2. Mark a point on the circle that is *not* on the highlighted arc from to . Each member of your group should choose a different location for point . Draw chords and . Use a protractor to find the approximate degree measure of angle .
3. Share your results with your group. What do you notice about your answers?
4. Make a conjecture about the relationship between an **inscribed angle** and the central angle that defines the same arc.

#### Activity Synthesis







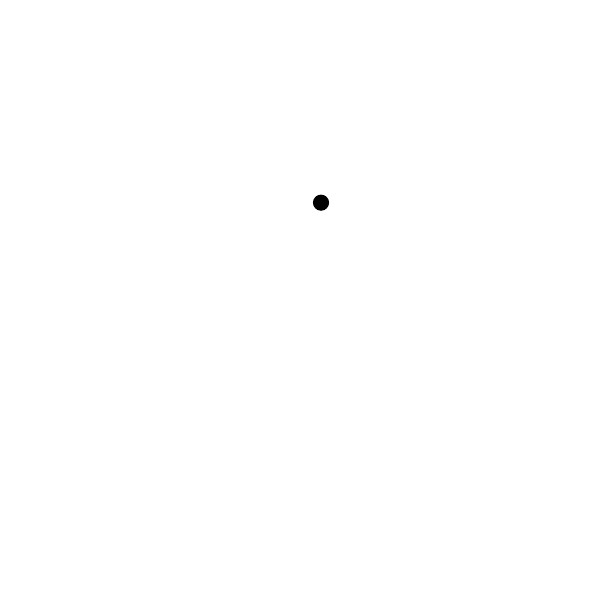


### 3 Similarity Returns

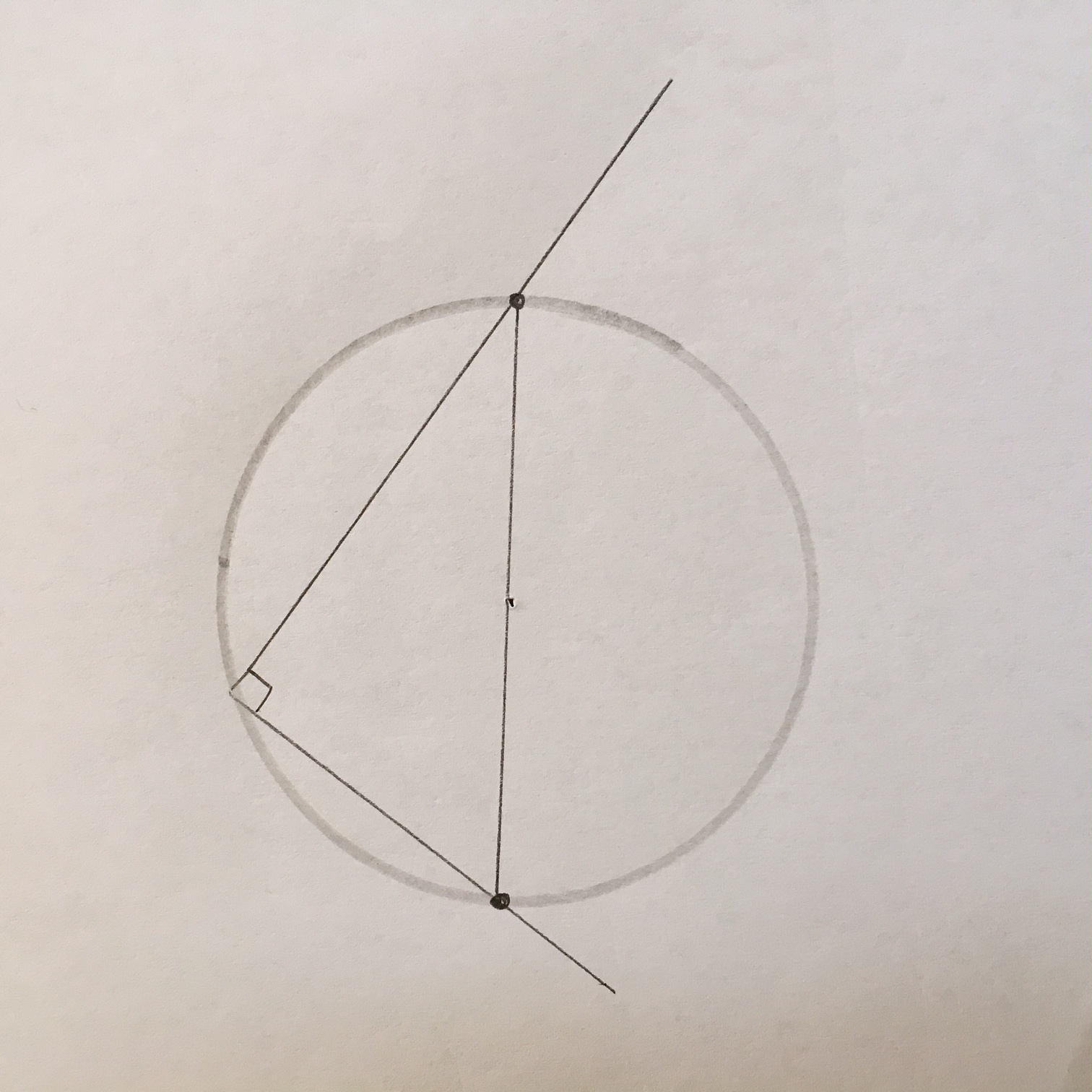
#### Student Task Statement

The image shows a circle with chords and . The highlighted arc from point to point measures 100 degrees. The highlighted arc from point to point measures 140 degrees.

Prove that triangles and are similar.



#### Images for Activity Synthesis





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