

Central and Inscribed Angles

Define each term in your own words. Use diagrams. The proof and corollaries should be written so that you could explain them to a classmate who missed today's lesson.

DEFINITIONS — with labeled diagrams

Central angle:	<i>Sketch:</i>
Inscribed angle:	
Intercepted arc:	

INSCRIBED ANGLE THEOREM — statement and diagram

Statement — in your own words:
Equation form:
What does 'subtend the same arc' mean? In your own words:

PROOF SKETCH — CASE 1 — center inside the inscribed angle

Given: Circle with center O . Points A, P, B on the circle. O lies inside $\angle APB$. Prove: $\angle APB = \frac{1}{2} \angle AOB$.
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CORONARY 1 — THALES' THEOREM — *and why it follows from the inscribed angle theorem*

Statement:

Why this follows from the inscribed angle theorem, in your own words

COROLLARY 2 — INSCRIBED QUADRILATERAL

Statement:

Why opposite angles must be supplementary — in your own words: