## **Inscribed Angles**

Inscribed angles exploration.

**Definition 1.** In a circle, a **central angle** has the center of the circle as its vertex. An **inscribed angle** has a point on the circle as its vertex. An **arc** of a circle has both a measure and a length. **Arc measure** indicates an amount of turning (in degrees). An **arc length** is a distance.

Geogebra link: https://tube.geogebra.org/m/zrapvzpz

- **Problem 1** (a) Keeping points A and C fixed, when point B moves,  $m \angle ABC$  (increases/ stays the same/ decreases/ varies widely).
  - (b) The arc measure is (equal to  $\sqrt{\ }$  half/ double/ unrelated to) the measure of the corresponding central angle.
  - (c) The measure of an inscribed angle is (equal to/half  $\sqrt{\ }$  double/unrelated to) the measure of the corresponding central angle.
  - (d) The measure of an inscribed angle is (equal to/half  $\checkmark$ / double/ unrelated to) the measure of the corresponding arc.

Maybe some questions about visually estimating angle measures or arc measures.

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