Basics of Circles   (Unit 3)

Learning Target:

- **I can define and identify parts of a circle.**
- **I can find the measures of central and inscribed angles.**

Activity 1: Vocabulary of circles

Choose one (or more) of the above review options to go through and practice your circle vocabulary.

Video: https://www.youtube.com/watch?v=EAsJPCkq4ew

Powerpoint: http://schoolwires.henry.k12.ga.us/cms/lib08/GA01000549/Centricity/Domain/6678/Circle%20Vocabulary.pptx

Quizlet:

 https://quizlet.com/953846/circle-vocabulary-geometry-flash-cards/

Activity 2: Inscribed angles vs. central angles

Go through one or both of the Powerpoint videos for more information on circles.

http://www.rowan.k12.ky.us/userfiles/1211/Classes/9546/Powerpoint%20on%20inscribe%20angles%20and%20central%20angles.pptm

http://teachers.henrico.k12.va.us/henrico/palen_l/ppt/LESSON8-5.ppt

HW:

1) **Go to join.quizizz.com (on phone or computer) and do the following assessments. Enter your real name to receive credit for this activity. The codes for the two assignments are 140294, 499166, 481908, and 109278.**
2) **(3.2) handout**

Learning Target:

- **I can find the measures of angles and arcs formed by secants, tangents, and chords of circles.**

Activity 3: Interior and exterior angles in circles

Choose one (or more) of the video options to go through and practice.

https://www.youtube.com/watch?v=z3yKPYk-xik

https://www.youtube.com/watch?v=zKYGxYpaN2A

Guided notes

http://www.mathwarehouse.com/geometry/circle/tangents-secants-arcs-angles.php

If two secants or chords intersect in the interior of a circle, then the measure of the angle formed is half the sum of the measure of its intercepted arcs.

If two segments intersect in the exterior of a circle, then the measure of the angle formed is half the difference of the measure of its intercepted arcs.

Secant and Tangent

Two Tangents

Two Secants
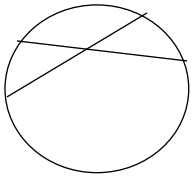
Interior Angle – vertex of angle inside the circle (not at center)
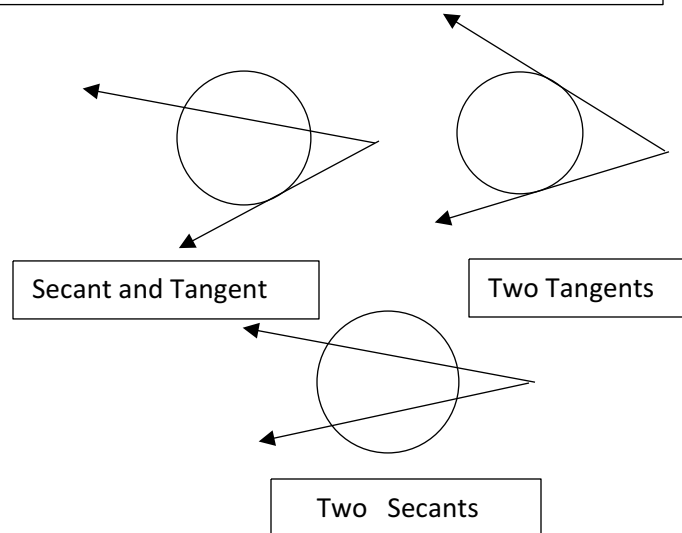
$$\angle = \tfrac{1}{2}\,(\text{arc} + \text{arc})$$

Or

$$\angle = \frac{\text{arc} + \text{arc}}{2}$$

HW: (3.3) handout

Exterior Angle – vertex of angle outside the circle

$$\angle = \tfrac{1}{2}\,(\text{big arc} - \text{little arc})$$

Or

$$\angle = \frac{\text{big arc} - \text{little arc}}{2}$$