Pre-AP Geometry Circle Unit Daily Lessons

Thurs-Fri, April 4-5, 2019 (in previous unit, but half of this block was about circles)

Objective: I can demonstrate mastery over area of two-dimensional figures. I can describe parts of circles from sketches, find arc length, and understand tangent and inscribed angle relationships.

* Check/correct HW #4 review assignment; quick questions
* Circle note-building activity: questioning to develop vocabulary, How to find arc length (practice) and discussion to develop relationships between tangent line and radius, inscribed angle and intercepted arc, angle inscribed in semicircle, angles intercepting same arc.
* Quiz 8.1-6 – 43 pts
* HW #5 – open response practice. Type if possible.

Mon-Tues, April 8-9, 2019

Objective: I can discover and apply some vocabulary and relationships related to circles. I can use prior knowledge to address level 2-3 questions from Aspire released items.

* Circle activity – go through all vocabulary, finding examples, vocabulary questions on p 452, research and use conjectures about tangent lines and inscribed angles.
* HW #5 – 4 pt grade
* Share good answers to HW #5. How to write good answers for open response on Aspire: 3 sentences, use high school math vocabulary, answer the question asked, is there a counterexample in your reasoning? Then say more to correct it.
* Test Nav practice items that are level 2 and 3.
* NO HOMEWORK

Wed-Thurs, April 10-11, 2019

Objective: I can discover and apply properties of circles.

* Activity: writing definitions from sketches on p 66-67 of textbook.
* Hand out list of vocabulary to write up in Geometric Truth. Glue in notes sheet so that you don’t need sketches on your vocabulary (do this for homework)
* In longer classes – discuss aspire. Go over C-76-80 from section 9.2.
* Model: shot put. At what angle does it release? What about an orbit? What force is this?

Answer to conjecture on p . What are tangent segments? Can you have just one tangent segment? Why or why not? Answer to conjecture.

* Handout with HW #6: Write up vocabulary and two conjectures, do p. 455, 1-6, write down conjecture number that helped you figure out the answer. Show what you put in calculator. If you have a compass, do 8,11-12; if you do not, then do 14

Quiz 9.1-4 on Thurs-Fri, April 18-19

Fri-Mon, April 12,15, 2019

Objective: I can sketch and understand chord properties if equal in length or bisected. I can discover and apply inscribed angle properties in circles.

* Warm-up: fill-in-the-blank from GT
* Warm-up: Investigation activity to discover C-75-80. Try problems from p 461:1-12.
* Take a grade on HW #6 and Geometric Truth entries – 6 pts
* Is your geometric truth caught up? Sketch handout glued into Geometric Truth?
* Share HW #6 (ask questions) and good problems on the warm-up (ask questions). Discuss how problem 5 is an inscribed circle….. definition of inscribed circle is now: a circle that is tangent to all the sides of a polygon.
* Geogebra demonstration/class investigation/ note-taking activity. Geogebra demonstration of C-81-84. Notes on blog. HW #7: p 468:1-16

Quiz 6.1-3 -24 pts, Thurs-Fri, April 18-19

Tues-Wed, April 16-17, 2019

Objective: I can apply circle properties to find unknowns. I can find circumference and arc length in circles.

* Define and sketch in GT: inscribed angle, secant, cyclic quadrilateral
* Warm-up: p 494:50-51, p 474: 8
* Take a grade on #7 – 4 pts; be sure to catch up Conjectures in GT through 85.
* Investigate: C-85. Use to add #8 to homework.
* Check/correct/question HW and warm-up
* Notes and Practice: circumference and arc length
* HW #8 p 483:1-4, p 478:1-12
* Review worksheet in class (finish as homework)
* Quiz hints: study HW #6-7, work review worksheet. 4 sketches, 12 unknowns, 24 pts, next block!

Thursday-Friday, April 18-19, 2019

Objective: I can find special points and degrees on the unit circle. I can demonstrate mastery over circle properties.

* Warm-up: quadrilateral inscribed in circle: find missing information.
* Go over warm-up and HW #8 and worksheet. Answers questions. How to “work backward” with algebra to find radius or diameter if you know arc length and angle, etc.
* Unit Circle: what is it? How do I find degrees and coordinates of special angles on the unit circle.
* HW #9 – find coordinates and degrees on unit circle, then do p 479: 13,14,16, p 483-4: 5-7,9-10, 17-18.
* Quiz 9.1-3 – 24 pts

Unit Test Thurs (0B) – Mon (6th), April 25-29. 70 pts

Mon-Tues, April 22-23, 2019

Objective: I can find radians, degrees, and coordinates on unit circle, understanding that radians are arc length/radius.

* Warm-up: on board, problems to lead to definition of radians (arc length/radius ). Equation of a circle practice. Partial area of a circle with right triangle removed.
* Take grades (in all but 1st)
* Answers to warm-up, HW #9, coordinates and degrees on unit circle.
* Unit Circle – What is a radian measure? Finding radians on unit circle. Practice. Also- how to interpret coordinates on Unit Circle using cosine and sine.
* Pass out test topics with review assignment (B day).
* HW #10 (A day and 6th period 10th graders: p 462:13-15, p 475:11-19 (matching), p 484:12, p 494:54.
* View quizzes; make-up issues.

Test Thurs-Mon April 25-29, Circles, 70 pts

Wed, April 24, 2019 (A day only)

I can apply truth related to circles and their properties to solve problems.

* Warm-up: Unit Circle Problems, Similar Triangles (bowtie) problem, partial area.
* Take a grade on HW #10.
* Check Assignment #10, unit circle, and warm-up.
* Hand out review.
* Write up definitions from pp 504-507 in Geometric Truth. List is in the blog post. Due first day of next unit.
* Work on review.

Test Friday, april 26, Circles, 70 pts

Thursday, April 25, 2019

0B will do 2 unit circle problems, a bowtie problem, and answer questions on review.

Then test.

6th period 10 graders will get same lesson as A day.

OB will get the assignment to write up definitions from Chapter 11 for homework.

Thurs-Fri, April 26-27, 2018

Objective: I can demonstrate mastery over circle properties, vocabulary, circumference, and arc length.

* Warm-up: practice for test
* Self-check review/ questions
* Answers to warm-up
* Circle Test – 75 pts

NO HOMEWORK