Area Mini-Unit Daily Lessons  
Pre-AP Geometry 2018

Mon-Tues, March 26-27, 2018

Objective: I can develop intuitive processes to find areas of various 2-D figures. I can derive and apply area formulas for rectangles and parallelograms.

* What is area? (write your own ideas)
* Pre-view mini-unit, quiz dates, etc.
* Find the area of the triangle on the screen using any method you can figure out.
* Area by surrounding rectangle, share your strategy.
* Area by composition, share your strategy.
* Area by sliding vertex, share your strategy.
* Try these (performance tasks) by surrounding rectangle and by sliding vertex.
* Use one of these problems to develop the idea of area of a parallelogram.
* Notes and practice: rectangles and parallelograms.
* HW #1: pp 413-5: 1-13, 15-19, 22-24. Show work.
* View tests.

Quiz: Thurs-Fri, April 5-6, appr 40 pts

Wed-Thurs, March 28-29, 2018

Objective: I can derive formulas and find area for triangles, trapezoids, kites, and regular polygons.

* Warm-up: problems 2 and 8 from Discovering Geometry extra practice over 8.1. (This is partial area and area with coordinates.)
* Take a grade on HW #1 – 4 pts
* Check/correct/question HW #1 and warm-up.
* Notes and practice 8.2-3 – use graph paper to create notes over triangle area, trapezoid area, kite area, and regular polygon area.
* Practice: solve for a base in a trapezoid when you know area, height, and other base. (algebra)
* HW #2: pp 418-20: 1-11, 13, 16, 17, 29, 20, 23-26, p 427:1-2. Use formulas, show work!!! IF solving for a dimension: write formula, plug in what you know, solve for what you don’t know algebraically. Answer in correct units.
* View tests/ make-up issues.

Quiz Thurs-Fri, April 5-6, appr 40 pts

Fri-Mon, March 31 – April 2, 2018

Objective: I can derive and apply concepts of area and perimeter of circles. I can find area inside boundaries of 3 or 4 graphed lines.

* Warm-up: p 427-8: 3-6, 12 and: Find the rea of a circle with a circumference of 10π cm. Leave answer in terms of π.
* Take a grade on HW #2
* Go over HW #2 and warm-up. Use last warm-up problem as jumping off point for new content on circles.
* What is Pi? How do I get from that definition to definition of Circumference of a circle? Demonstrate the concept of area of a circle as dissection of a circle into a rectangle with 16 “pizza slices”. Practice applying the formulas and going back and forth between circumference and area.
* Bounded area activity on graph paper. Self-check if you finish. If you don’t finish, then finish this for homework in addition to HW #3.
* HW #3 – pp 427-9: 7-8,13, 15-16, p 435: 1-14

Quiz Thurs-Fri, Area, 40 pts (review next time)

Tues-Wed, April 3-4, 2018

Objective: I can find partial area of circles by reasoning from area formula. I can find surface area of solids by adding areas of surfaces (not by memorizing formulas).

* Warm-up: find half of a circle, fourth of a circle, and 60 degrees of a circle. What if it were 80 degrees?
* Notes and Practice: surface area from pp 445-449.
* Try in class: p 450:1-8, pp 439-41: 1-3,6,17
* Take a grade on HW #3 and bounded area worksheet – 6 pts
* Pass out answers to homework and put some on screen (including worksheet); self check
* HW #4 (review) pp 455-458: 1-10, 17-24, 26, 29-31, 44
* Preview of next class on circles and open response practice.

Quiz over area on Thurs-Fri, 40 pts

Thurs-Fri, April 5-6, 2018

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: highlighters for questions, questioning to develop vocabulary, How to find arc length (practice) and discussion to develop relationships between tangent line and radius, between intersecting tangent segments, inscribed angle and intercepted arc, angle inscribed in semicircle, angles intercepting same arc, and opposite angles of an inscribed quadrilateral (cyclic).
* Quiz 8.1-7 – 40 pts
* HW #5 – open response practice. 6th period please do yours and check my website Monday night for some suggested answers.

Mon-Tues, April 9-10, 2018

Objective: I can apply prior knowledge and reasoning to solve problems in format similar to Math EHS Aspire test.

* Schedules and hints for the testing week and math test (calculators, time countdown, scratch, etc.).
* Practice on IPADS or Chromebooks on Math Test Nav
* Take a grade on HW #4 and #5 – 4 pts each
* Share answers to HW and to questions on the practice.
* NO HOMEWORK!

6th period – check answers to HW #5 on my daily blog.