Area Mini-Unit Daily Lessons
Pre-AP Geometry 2020 (Blocks 2-5 of AMI)

Wed-Thurs, March 18-19, 2020

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.

* 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.
* AMI #2: Try these (performance tasks) by surrounding rectangle or composition.
* Use one of these problems to develop the idea of area of a parallelogram.
* Notes and practice: rectangles and parallelograms. Solving for a dimension.
* AMI #2: worksheet from old textbook.
* Make-up issues.

Fri, March 20 – Monday, March 30

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.)
* 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)
* AMI #3: pp 413-4:7-14, 20-21, p 422: 9-10, 12, 16, p 416:1,4,5. 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.

Tues-Wed, March 31-April 1

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 422-3:11, 19, 20
* Take a grade on HW #2
* Go over HW #2 and warm-up.
* 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.
* AMI #4 – pp 417-8: 9, 12, pp 422-3: 1-8, 13-14, 17-18, p 424: 23-24.

Tues-Wed, April 2-3, 2019

Objective: I can find partial area of circles by reasoning from area formula.

* Warm-up: find half of a circle, fourth of a circle, and 60 degrees of a circle. What if it were 80 degrees?
* AMI #5: p 436:1-8, pp 426-8: 1-3, 6, 15.
* AMI #5: Do all linear problems from handout + bounded area worksheet