Geometry 2017

Quadrilateral/Algebra Unit Daily Lessons

Tuesday, April 11, 2017

Objective: I can compare types of quadrilaterals, describing their definitions from sketches. I can find area of figures in coordinate grids by subtracting from a rectangle or by dividing into smaller areas that I know.

* Make-up issues for test.
* Note-building activity – quadrilaterals.
* Venn diagram – types of quadrilaterals.
* Popcorn questions: Always/sometimes/never on types of quadrilaterals
* Trapezoid problem – find the area. Share methods.
* Area of right triangles (multiply legs, divide by 2)
* Methods of finding area – adding together or surrounding rectangle. 4 problems on scree.
* HW #4 – start in class. Graph coordinates to find triangles and quadrilaterals. Find the area by the method of your choice.

Thursday, April 13, 2017

Objective: I can identify and describe type of quadrilateral. I can find area and perimeter of quadrilaterals in the coordinate plane.

* Warm-up: area on “geoboard” activity: 1,3,6,8,10. Partner correct your homework also.
* Take a grade on HW #4 – 4 pts
* Share HW answers, then warm-up answers. Questions.
* Triangle activity – copy triangle, find area by the method of your choice. Now try to find perimeter. (Discover the Pythagorean theorem as key to the sides that are not vertical or horizontal.)
* Notes and practice – finding perimeter
* Activity (finish for homework) – area and perimeter and name for 6 different quadrilaterals.
* View tests/ make-up issues

Monday, April 17, 2017

Objective: I can discover and apply properties of parallelograms. I can find perimeter and area of quadrilaterals in the coordinate plane.

* When is your ASPIRE Math test? Where? What will it be like? Good strategies. Why is it important?
* Warm-up: practice finding area and perimeter in the coordinate plane. Identify the figure. (self-check HW while working)
* During warm-up: Ms. Bogart views HW #5 – area and perimeter activity. If you make 5/5, then you do not have to take today’s homework quiz.
* Activity: discovering parallelogram properties
* Answers to HW, warm-up, and investigation.
* HW #6 worksheet. (If time, do 6 problems from Discovering Geometry

Wednesday, April 19, 2017

Objective: I can use slope and distance to determine type of quadrilaterals from vertices.

* Warm-up: find the angles in the parallelogram and trapezoid. What will make this parallelogram to be a rhombus? To be a rectangle?
* Take a grade on HW #6. Make-up issues for those who were absent Monday. Still have not taken test. (grade was 4 pts)
* Answers popcorn to warm-up. To homework.
* Slope/distance definition activity. First make sure how to interpret 4 slopes as parallel, not parallel, or perpendicular. Use flowchart to determine type of quadrilateral.
* Finish activity as HW #7, include two homework problems at the bottom of the page.
* HW Quiz over HW #6 at the beginning of class on Friday!

Friday, April 21, 2017

Objective: I can discover how to find the sum of the angles of a polygon with n sides, and how to find one angle in a regular n-gon.

* HW Quiz over HW #6
* Take a grade on HW #7
* Answers to HW, questions
* Investigation – polygon sums of interior angles.
* HW #8 – worksheet
* TGS, make-up issues

Tuesday, April 25, 2017

Objective: I can discover and apply properties of diagonals of parallelograms. I can find one angle or a sum of all the angles in a polygon.

* Make-up issues from last Friday
* Go over investigation from last Friday so that those who were absent can record formulas 180(n-2) and 180(n-2)/n - sum and one angle of angles in an n-gon.
* Answers to HW. Questions.
* Teacher led investigation of parallelogram diagonals with fixed length of diagonals to intersect at different angles. This allowed us to observe what is true about diagonals of parallelograms, rectangles, rhombuses, and squares. Applied on p 290:11-13.
* Work on Unit Review – HW #9.
* Take a grade on HW #8, #7 if absent Friday. – 4 pts each.

First half of Unit Test at end of class on Thursday, last part (distance/ slope, etc.) at beginning of class on Monday, May 1.

Thursday, April 27, 2017

Objective: I can demonstrate mastery over polygon sum, quadrilateral properties, and algebraic applications of these.

* Complete review, grade, check
* Test, Part A – 2nd part on Monday (all algebra – slope, distance, diagonals of quads)

Monday, May 1, 2017

Objective: I can demonstrate mastery over quadrilaterals and algebra.

* Look over notes: flowchart, diagonals, slopes, area and perimeter.
* Part B of Unit Test – (about 50-55 pts altogether)
* Circle Investigation
* Add to investigation from questioning in class.
* Do p 70:1-8,10 in class

Circle/Measurement Unit upcoming will be tested as final. The unit test is your final, except for 2 open response problems – one about quadrilaterals and one about right triangles.