Algebra/Geometry Institute Summer 2003

Lesson Plan 1

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Faculty Name: Bobbie J. Griffin School: George H. Oliver Elementary City: Clarksdale, Mississippi Grade Level: 6th Grade



Teaching objective(s) Find the area of rectangles, parallelograms, and squares

2 Instructional Activities

- a. On grid paper have the students draw a rectangle three units wide and four units long. Discuss how many square units the rectangle encloses.
- b. The students will draw a square yard, square foot, and a square inch on the chalkboard. Discuss how the square area is dependent on the square unit.
- c. In pairs give students a problem to explore and discuss. **Problem**: Draw a 10-unit by 20 -unit rectangle. How many square units does your rectangle enclose? Name as many ways as you can that would get the answer. What is a rule (operation) that would get the answer you have other than drawing?
- d. Give each group a different parallelogram, centimeter grid paper and patty paper. Have student cut off an end (triangle) from the parallelogram and reposition it at the opposite end to form a rectangle.

Use the patty paper to trace your new rectangle and lay the tracing on the grid paper to find the area.

- e. Using grid paper, draw various rectangles, squares, and parallelograms (the students) discuss the area of each. **Examples:** 4x4, 2x4, 4x8, 2x2, 4x3. Ask, Can you come up with a number sentence that will tell how many squares are in each quadrilateral?
- f. In groups of 2-4 at assigned stations (6) make a square, rectangle and parallelogram using colored blocks as units. Exchange stations and have another group find the area of the other group constructions at a given signal or specified time.
- g. Give each student a zip lock bag of gumdrops or marshmallows and toothpicks have them construct squares, rectangles, and parallelograms. Have each student tell the area that each encloses. Combine their construction with another group and discuss how the area changed.

3 Materials and Resources

- a. Grid paper
- b. Patty paper
- c. Scissors
- d. Colored blocks
- e. Marshmallows or gumdrops

- f. Toothpicks
- g. Ziploc bags
- h. © 2001 Silver Burdett Ginn: <u>Mathematics the Path to Math Success</u>, 6th Grade

4 Assessment

Oral activity Problem observation Journal Writing Self-checking