

Lesson 71

Objective

Students will learn the terms rhombus and trapezoid.

Students will learn that attributes belonging to a category of figures (such as rectangles) will also belong to all subcategories of that category (squares).

Students will learn division facts with remainders with dividends to 81.

Preparation

No special preparation is required.

Lesson Plan

For the definition of a rhombus, the students should be able to give the definition of a parallelogram in their own words. For the definition of a trapezoid, they should be able to give the definition of a quadrilateral in their own words.

Next, write the words trapezoid, rhombus and square on the board. Ask the students what other words can be used to classify each figure.

- trapezoid – polygon, quadrilateral
- rhombus – polygon, quadrilateral, parallelogram
- square – polygon, quadrilateral, rectangle, parallelogram, rhombus

For the portion of the Lesson that identifies the shapes, have the students give you the figures that fall into each category.

As you review their answers, help the students understand that since squares are rectangles, the shapes that they have listed

as squares will also be listed on the line for rectangles.

Ask the students to name some characteristics of rectangles. Point out that since rectangles have four right angles and squares are rectangles, all squares have four right angles.

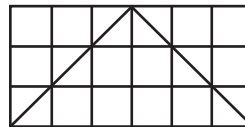
Ask the students to name some characteristics of polygons. Explain that since polygons have 3 or more straight lines, and all rectangles and squares have 3 or more straight lines, all rectangles and squares are polygons. Help the students understand that rectangles and squares will also be listed on the line for polygons.

Use this same explanation to help the students understand that all trapezoids, parallelograms, and rhombus shapes are also polygons.

Compare the other shape terms in similar ways.

Stretch 71

How many triangles can you count?



Answer: 27 triangles:
 12 - diagonals through small squares,
 12 - 3 each inside the four large triangles formed by the diagonals and the center vertical line,
 3 - the center triangle