

Stretching and Shrinking Overview

Investigation One - Enlarging and Reducing Shapes

G.TR.07.06

Understand and use the fact that when two triangles are similar with scale factor of r , their areas are related by a factor of r squared

G.TR.07.03a

Understand that in similar polygons, corresponding angles are congruent and the ratio of corresponding sides are equal

Investigation Two - Similar Figures

G.TR.07.03a

Understand that in similar polygons, corresponding angles are congruent and the ratio of corresponding sides are equal

G.TR.07.04

Solve problems about similar figures and scale drawings

G.TR.07.03b

Understand the concepts of similar figures and scale factor

Investigation Three - Similar Polygons

G.TR.07.03a

Understand that in similar polygons, corresponding angles are congruent and the ratio of corresponding sides are equal

G.TR.07.03b

Understand the concepts of similar figures and scale factor

G.TR.07.06

Understand and use the fact that when two triangles are similar with scale factor, r , their areas are related by a factor of r squared

N.FL.07.05a

Solve proportion problems using such methods as unit rate, scaling, finding equivalent fractions and solving the proportion equation

$$\frac{a}{b} = \frac{c}{d}$$

G.TR.07.04

Solve problems about similar figures and scale drawings

N.FL.07.05b

Know how to see patterns about proportional situations in tables

Investigation Four - Similarity and Ratios

G.TR.07.05

Show that two triangles are similar using the criteria: corresponding angles are congruent (AAA similarity); the ratios of two pairs of corresponding sides are equal and the included angles are congruent (SAS similarity); ratios of all pairs of corresponding sides are equal (SSS similarity); use these criteria to solve problems and to justify arguments

N.FL.07.05a

Solve proportion problems using such methods as unit rate, scaling, finding equivalent fractions and solving the proportion equation

$$\frac{a}{b} = \frac{c}{d}$$

G.SR.08.04a

Find area of complex figures by sub-dividing them into basic shapes (quadrilaterals, triangles, circles)

Investigation Five - Using Similar Triangles and Rectangles

G.TR.07.04

Solve problems about similar figures and scale drawings

N.FL.07.05a

Solve proportion problems using such methods as unit rate, scaling, finding equivalent fractions and solving the proportion equation

$$\frac{a}{b} = \frac{c}{d}$$