

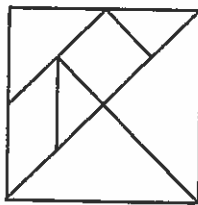


Tangram Fractions

Objective: to use tangram puzzle pieces to find equal but noncongruent areas that have equivalent representations in terms of fourths, eighths, and sixteenths.

Materials: a tangram puzzle.

Use a tangram puzzle or the drawing below and determine the fractional values of each of the pieces. The complete tangram square is the unit, or whole. Which of the pieces have equal area? Think about how you can identify the fractional value of each piece. What role will equivalent fractions play in your decisions? Label each piece using denominators of fourths, eighths, and sixteenths.



Exploring Fourths on a Geoboard

Materials: a geoboard or geoboard dot paper.

On a geoboard (or geoboard dot paper) make the largest square possible. Now divide the square to show fourths. Each fourth must be an area that if cut out of paper would remain in one piece. Make another square and show fourths that are irregularly shaped. Next make fourths that are not congruent but have equal area. Take each of your previous drawings of fourths and divide them further to show eighths.