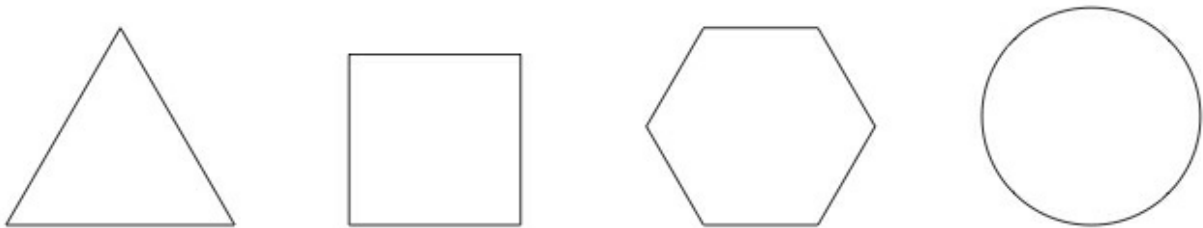


8.G Areas of Geometric Shapes with the Same Perimeter

Task

Below are pictures of an equilateral triangle, a square, a regular hexagon, and a circle each having the same perimeter:



- Find the area of the equilateral triangle whose perimeter is 1 unit.
- Find the area of the square whose perimeter is 1 unit.
- Find the area of the regular hexagon whose perimeter is one unit.
- Find the area of the circle whose perimeter is 1 unit.
- List the answers to (a), (b), (c) and (d) in increasing size. How do you think the area of a regular octagon with perimeter 1 unit would compare to the triangle, square, hexagon, and circle?

