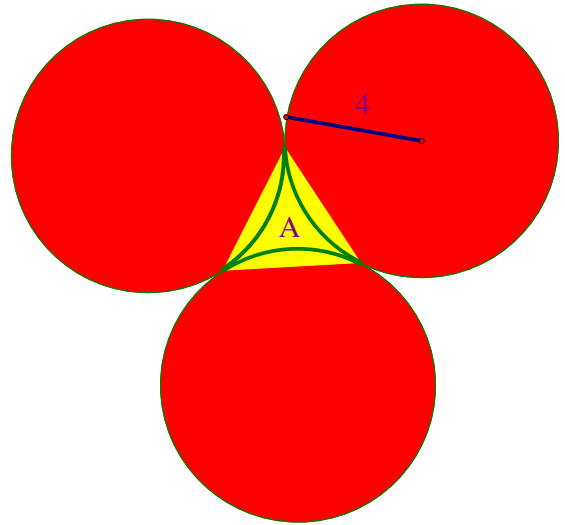


Problem Solving #6
Advanced Math Quarter 1

1. Find the area (labeled A) bounded by three circles of radius 4 that are all mutually tangent.



2. Find all values of x such that $|2x| + |x + 2| = 3$

3. In the table below, the sum of the numbers in each row, column, and diagonal is the same. What is the value of $P + Q + R + S$?

P	4	Q
10	16	22
R	28	S

4. A 10-foot piece of wire is cut into two pieces. One piece is bent to form a square. The other forms a circle inscribed in the square. How long is each piece?