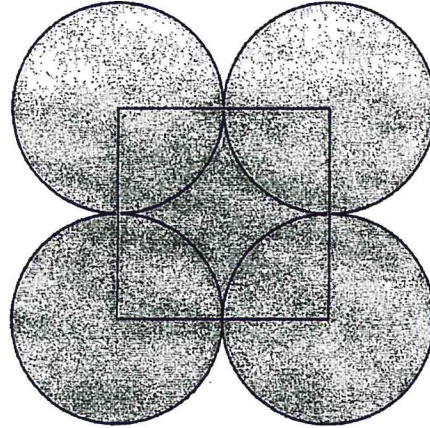# Four Circles

This problem gives you the chance to:
- work with shapes
- find areas of circles and squares
- make generalizations

T1

A shape is made by arranging four circles with their centers in a square.

The radius of each circle is 5 inches.

1. What is the area of the square?
   Show your calculation.   _____

2. What is the area of the whole shaded shape?
   Show how you figured it out.   _____

3. Find a formula for the area of the shaded shape if the radius of each circle is r inches.

_____

Presentation #272 , Brown, Using High Cognitive Demand Tasks to Explore Reasoning and Proof