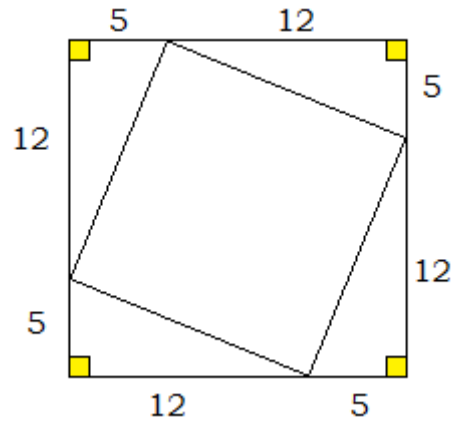


Princess Vulnavia presents ... Cloud 9; Revision Raindrops

Geometric Applications of Pythagoras' Theorem

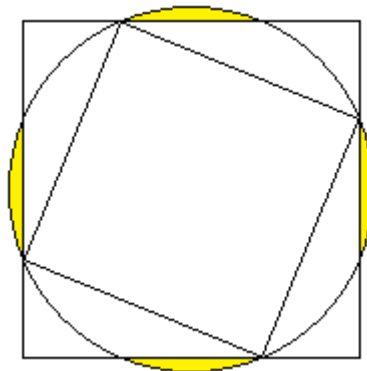
Raindrop 9a

Four equal right-angled triangles are placed together to produce a square of side 17 units, as shown in the following diagram.



The process also produces an internal square.

A circle is then drawn through the vertices of the internal square.



Calculate the total area of the four shaded regions.

The answer follows on the next page ...

Princess Vulnavia presents ... Cloud 9; Revision Raindrops

Raindrop 9a

Answer: The area of the four shaded regions = 13.0 square units {to 1 d.p.}