Mathematics

Right-angled triangles and tilted squares.

Downloadable resource.
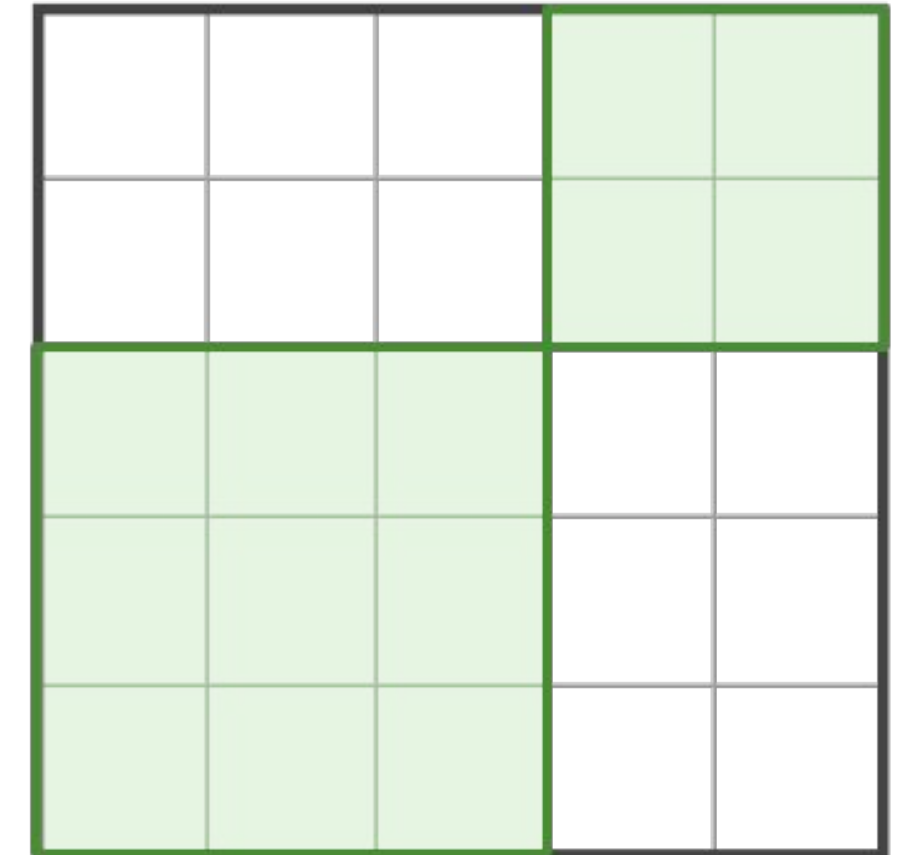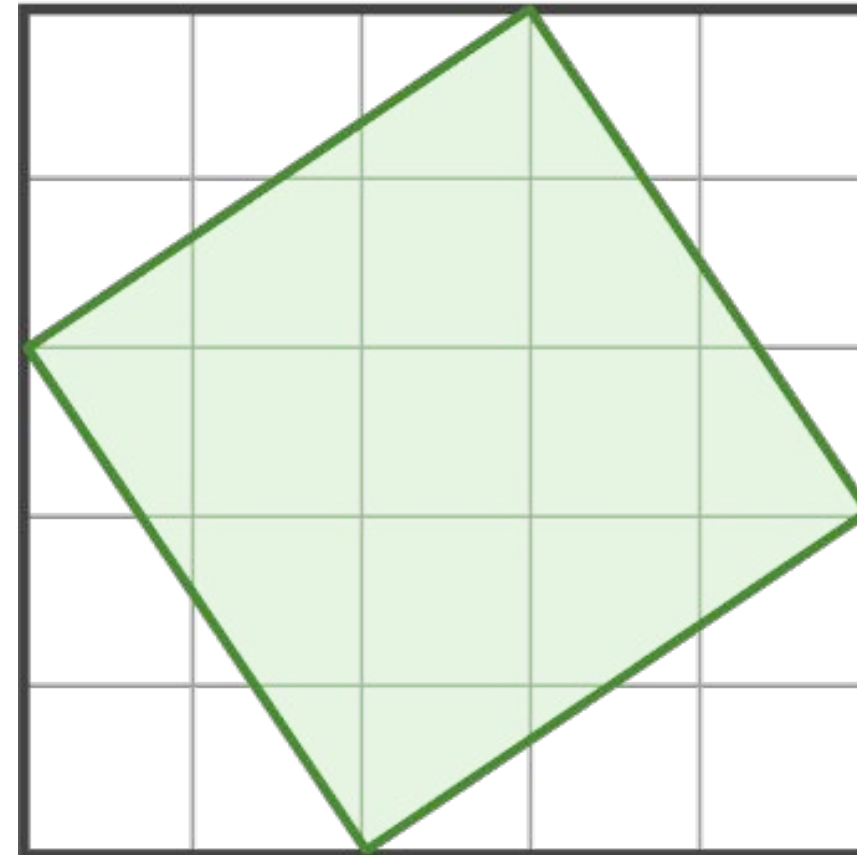## Lesson 4 of 8.

Dr Rim Saada

Try this

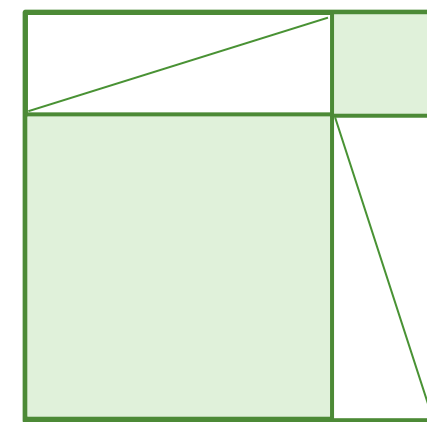Find the area and side lengths of these 3 squares.
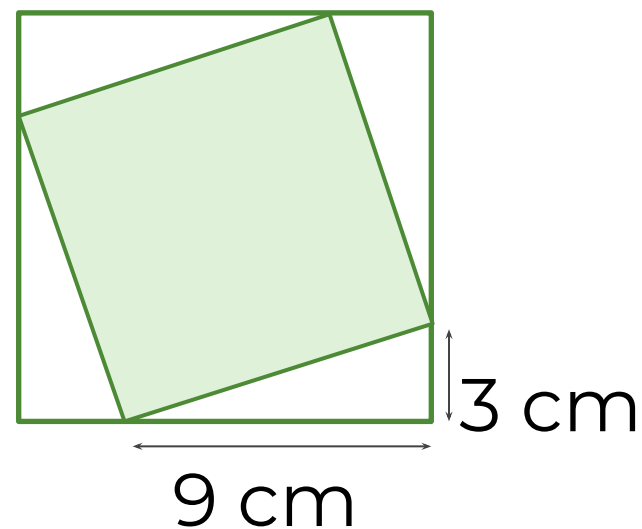
What do you notice?
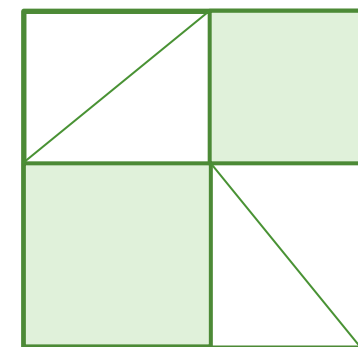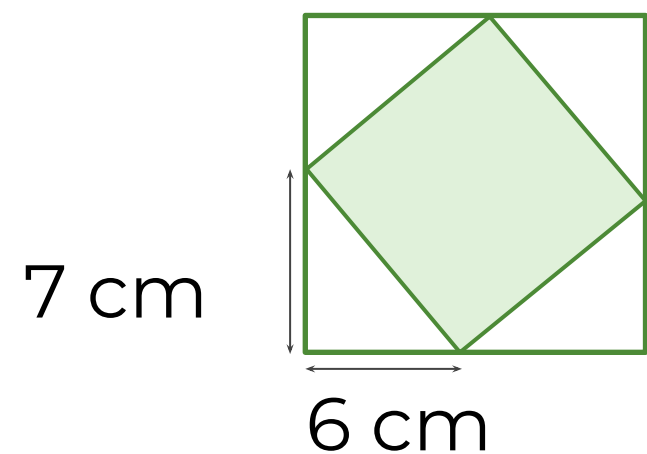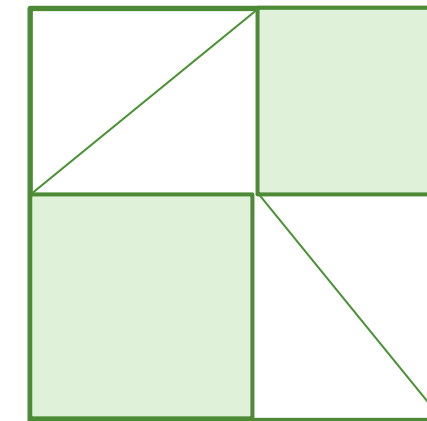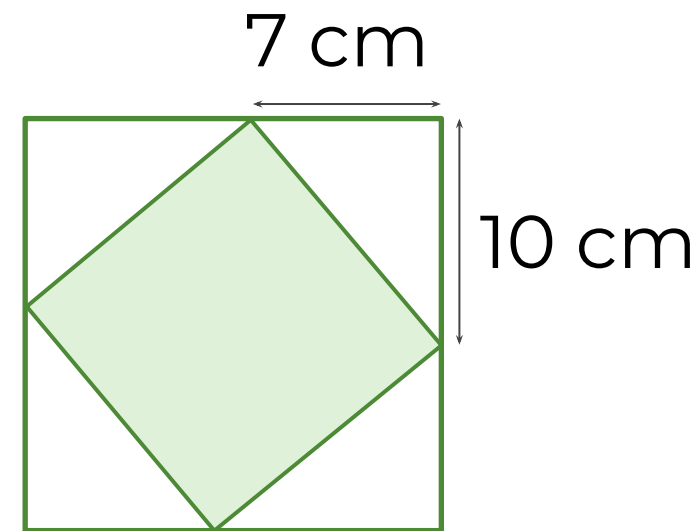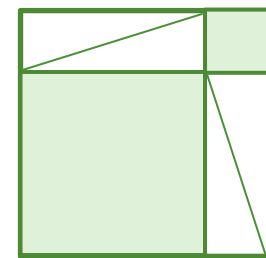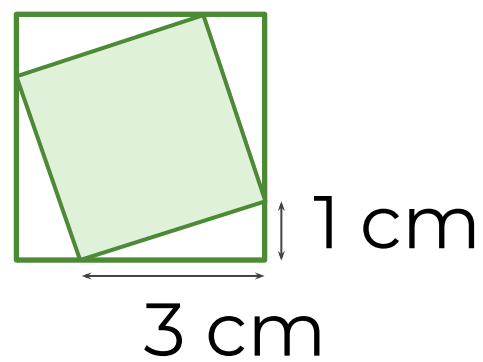
What's the same and what's different between the 2 diagrams?

Independent task

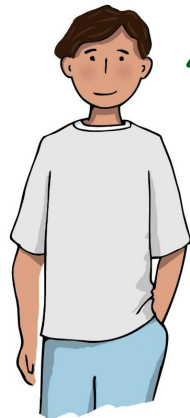In each pair of diagrams, all of the triangles are congruent. For each set:

1) Find the area of each green square.

2) Find the length of the final side of the triangle.

7 cm

10 cm
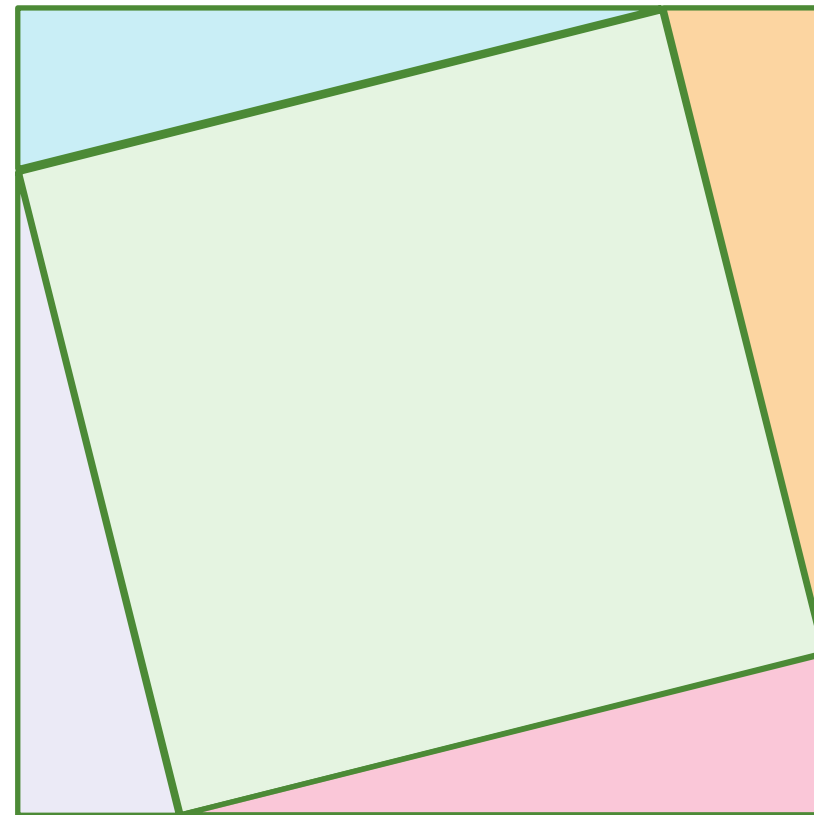
1 cm

3 cm

7 cm

6 cm

9 cm

3 cm

Explore

If the pink triangle has a base of 10 and a height of 3, what can you work out in the diagrams?

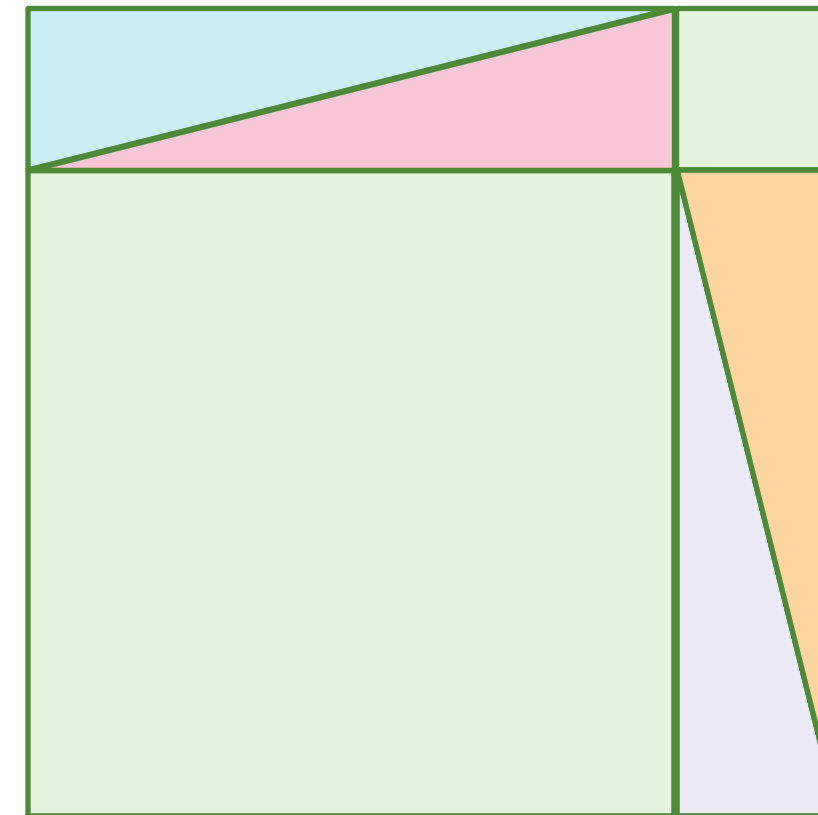I can work out the other side length of the largest green square.

I can work out the total area of the triangles.

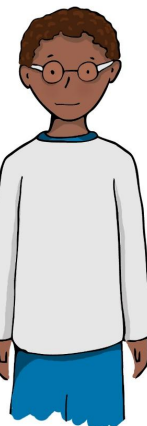I can work out the area of the smallest green square.

I can work out the area of the pink triangle.

I can work out the perimeter of the diagrams.

I can work out the area of the largest green square.

What if the base is 5 and the height is a?