

Mathematics

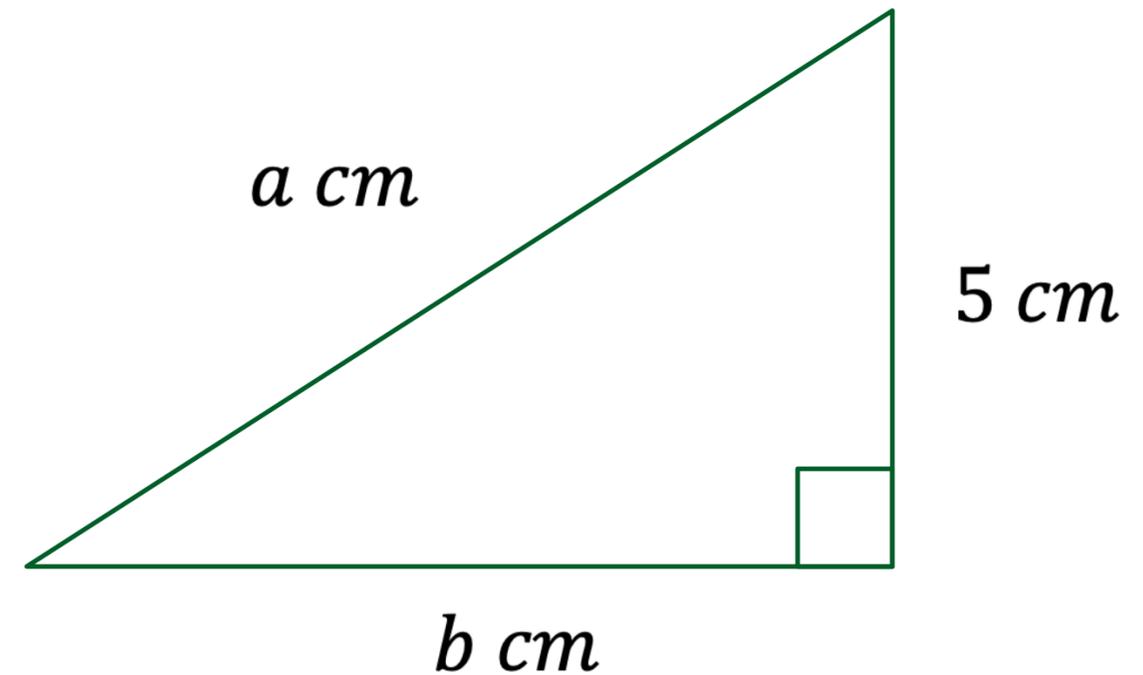
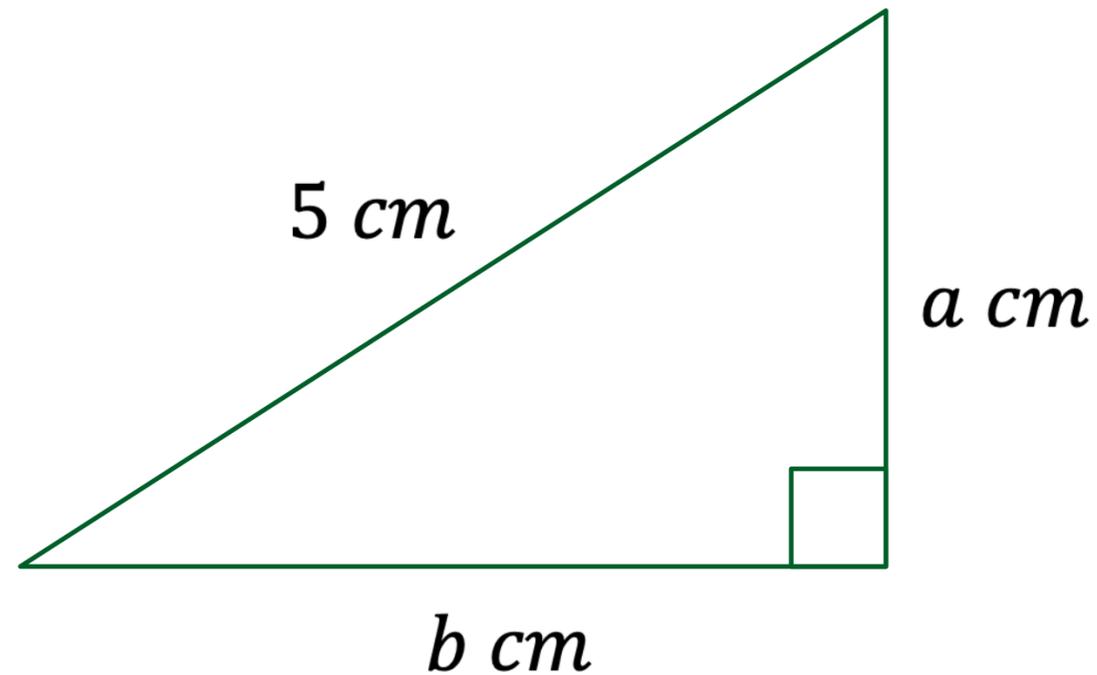
Surds and triangles

Dr Saada



Try this - Support

List some possible values of a and b in each case



Think about Pythagoras's theorem:

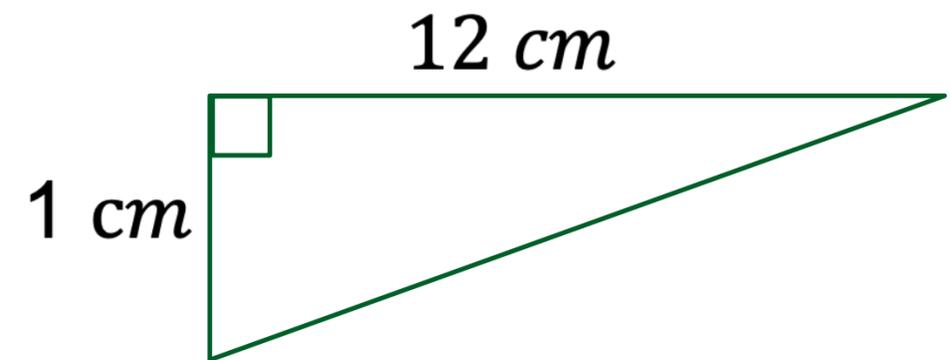
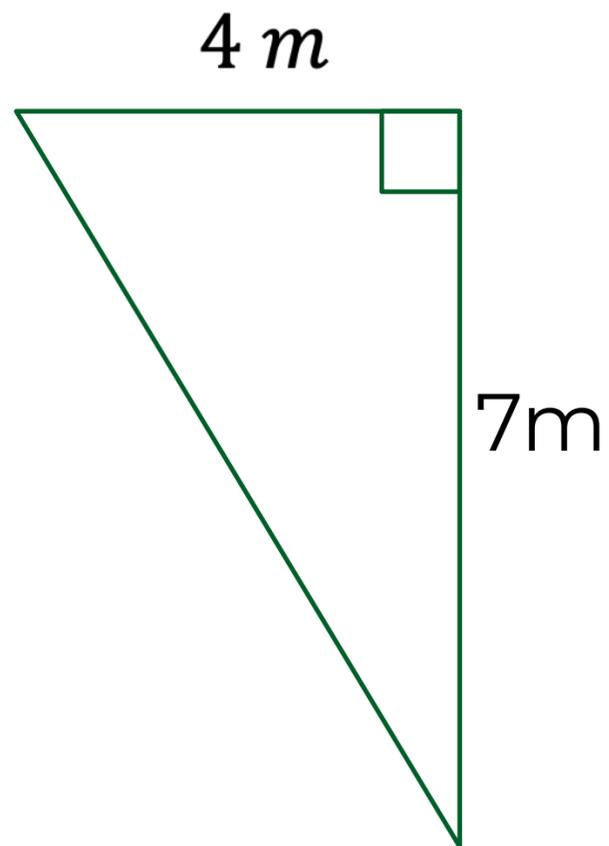
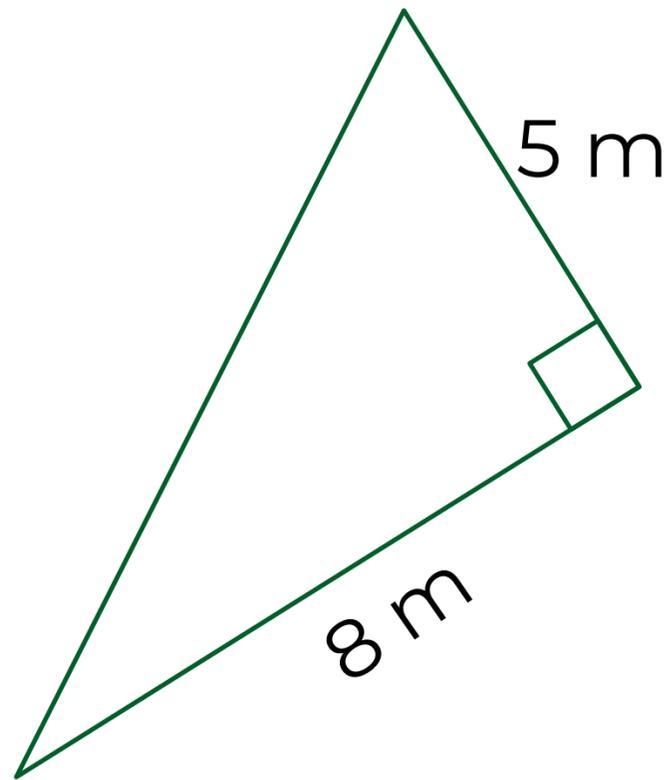
In a right-angled triangle, the sum of the squares of the shorter sides is equal to the square of the **hypotenuse**.



Connect

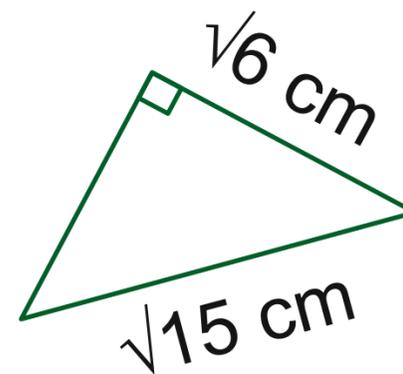
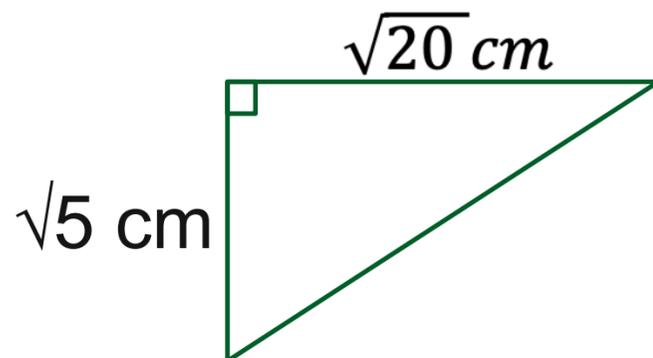
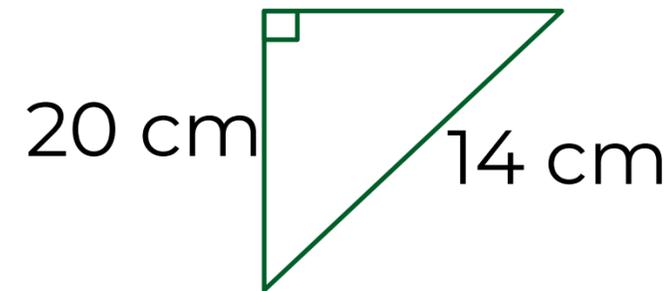
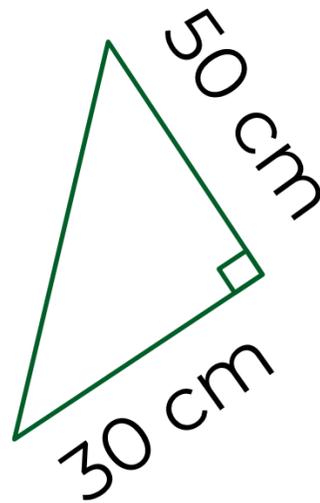
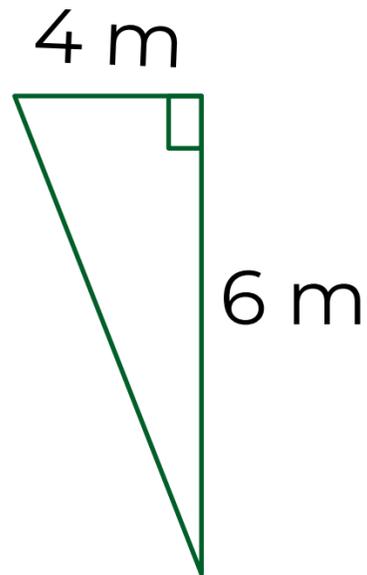
Calculate the lengths of the missing sides in each triangle.

Give the answer in surd form if it the answer is an irrational number..



Independent task

Calculate the lengths of the missing sides in each triangle.
If the answer is an irrational number, leave it in surd form.

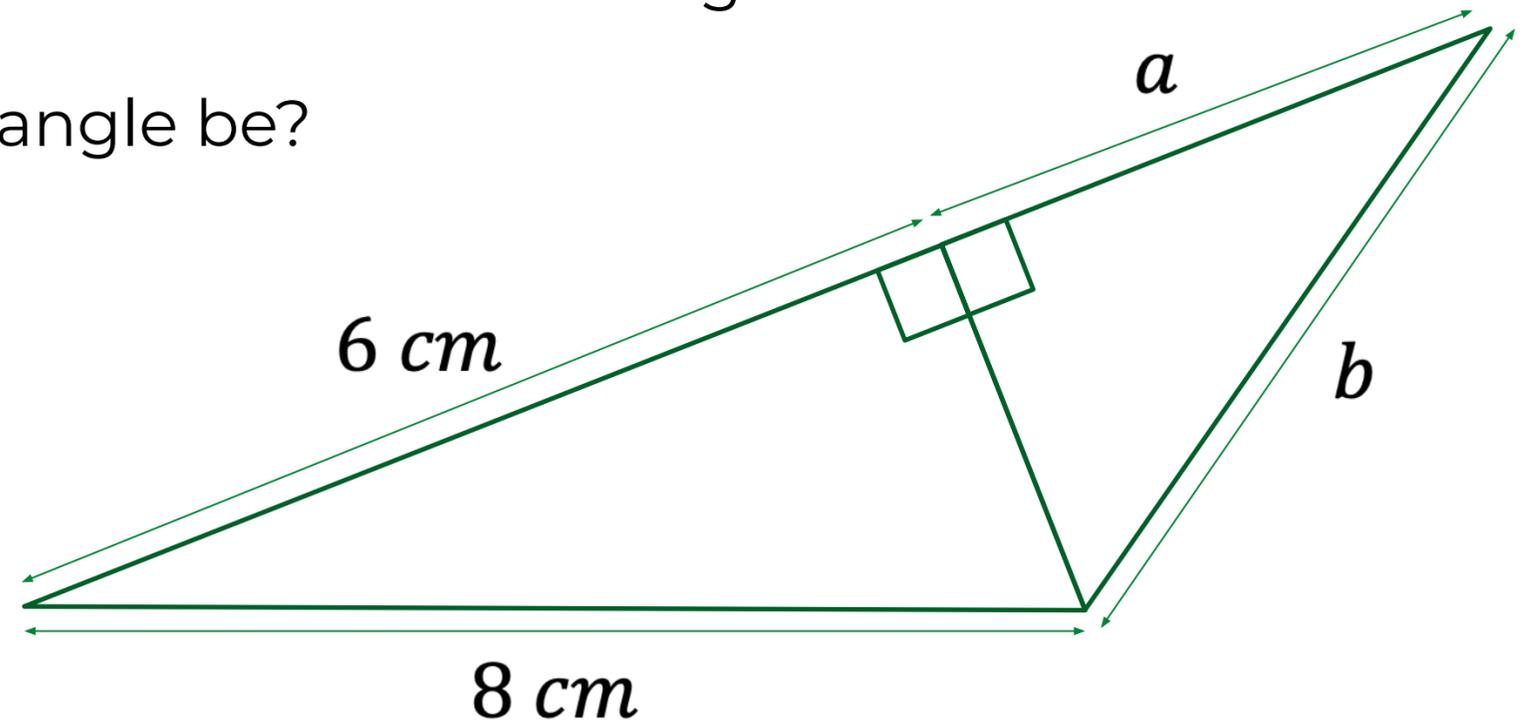


Explore

Tye forms a triangle by joining two right angle triangles.

One has side lengths of 6 cm and 8 cm. What is the third side length?

What could the side lengths of the other triangle be?



What types of triangle can you make by sticking together two right angle triangles?



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