

Mathematics

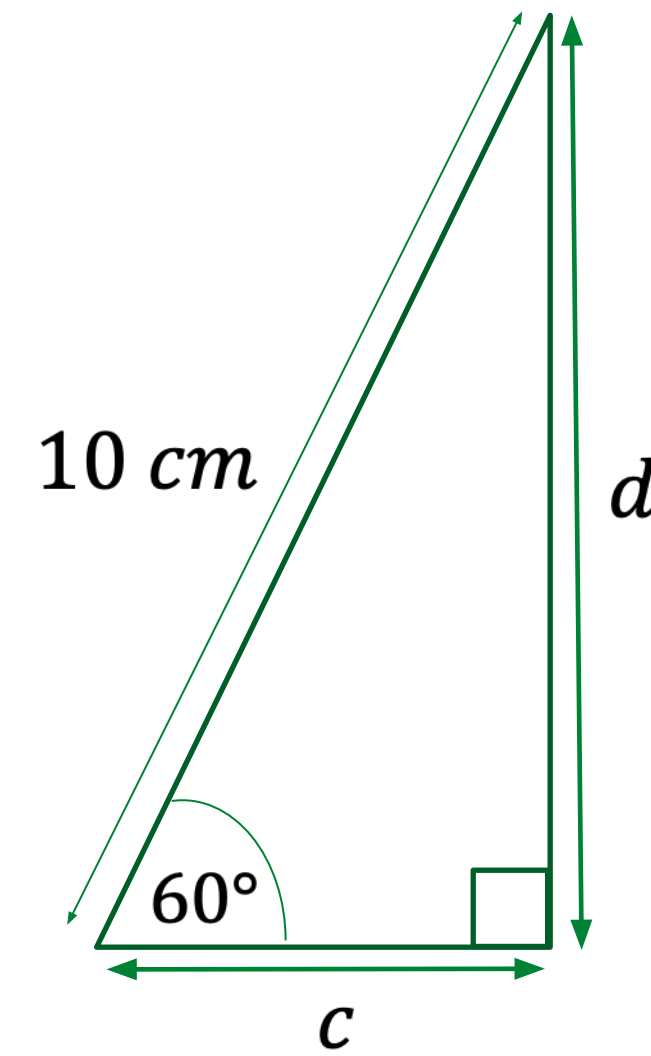
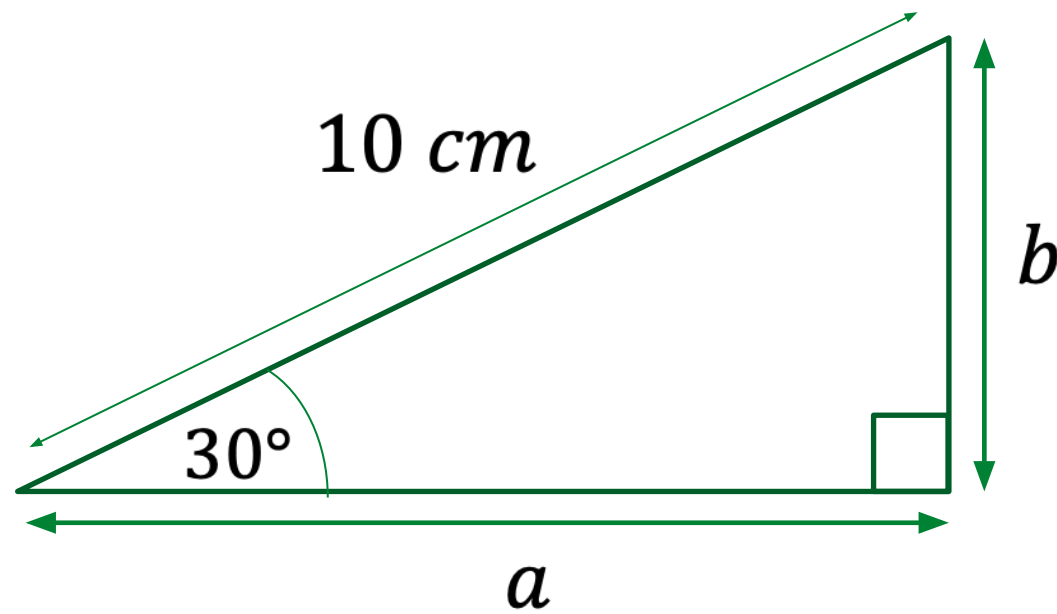
The sine and cosine ratios

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Try this

Can you find the length of sides a to d ?



Independent task

Construct and explore sine and cosine ratios in right angled triangles.

Pick your own side lengths. Choose the following angles: 10, 15, 30, 45, 60 and 75.

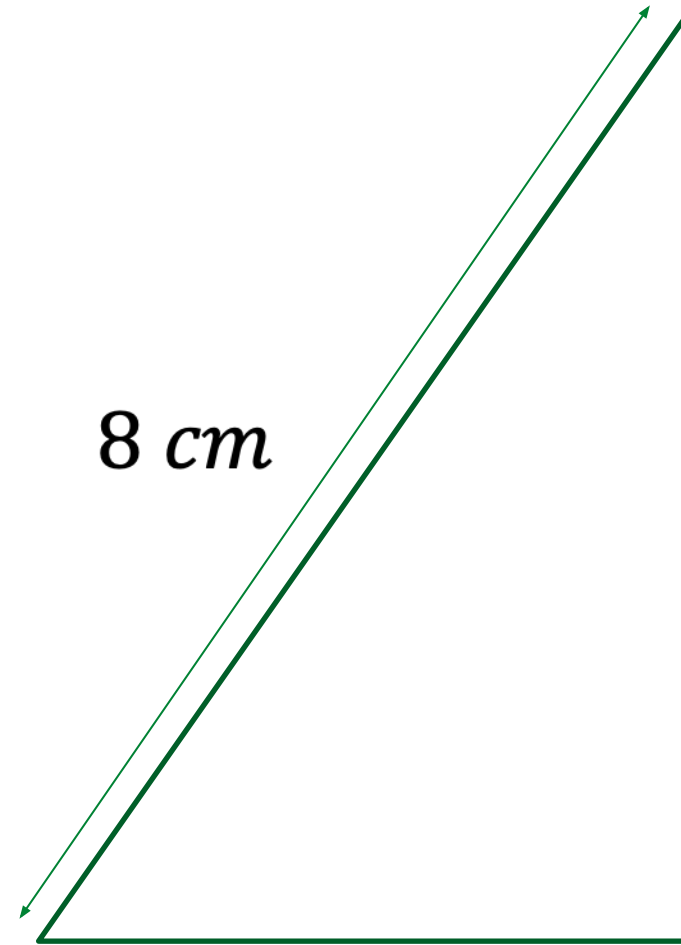
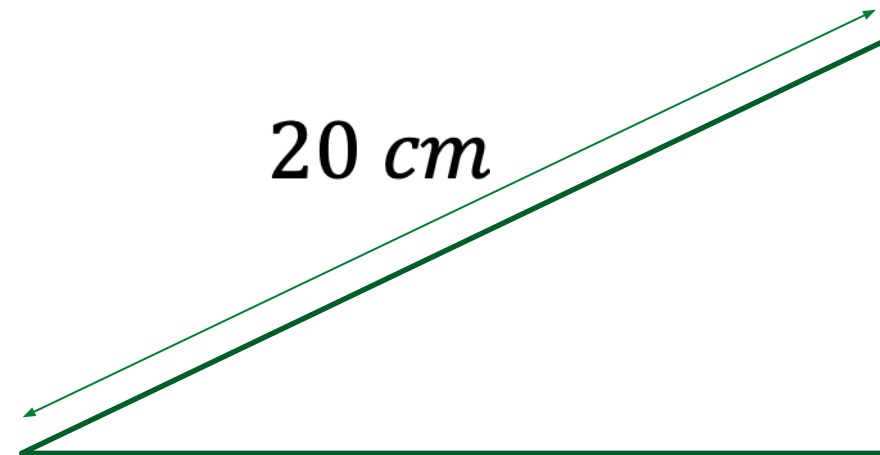
Angle						
Length of opposite						
Length of hypotenuse						
Length of adjacent						

b) Use your calculator to check the accuracy of your answers.

Hint: You should have some values to complete the table from Lesson 7 (the sine ratio).



Explore



I could use Pythagoras theorem with right angle triangles as well as $\sin(30)$ and $\cos(60)$

Can you find the missing sides?

What is the exact value of $\sin(60)$ and $\cos(30)$?

Try some different triangles.

