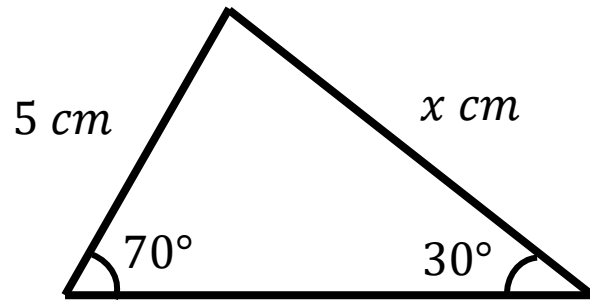


Sine/cosine rules and Area of triangle using $\frac{1}{2}ab\sin C$

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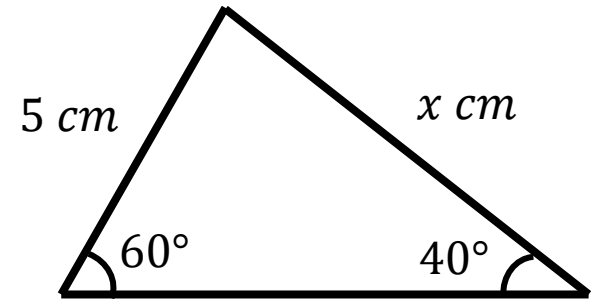
Worked example

Find the value of x



Your turn

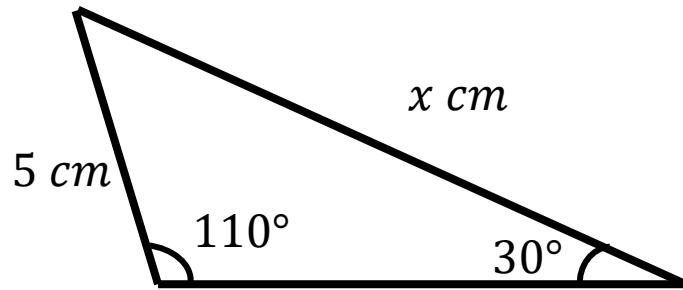
Find the value of x



$$x = 6.74 \text{ (2 dp)}$$

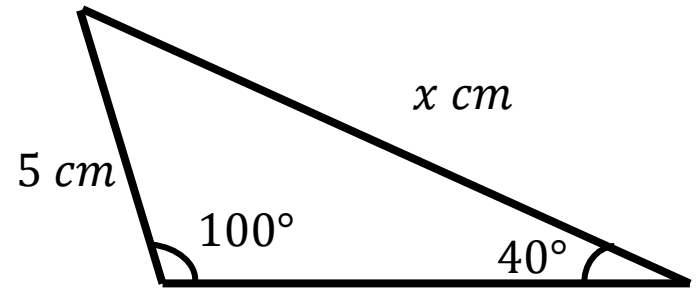
Worked example

Find the value of x



Your turn

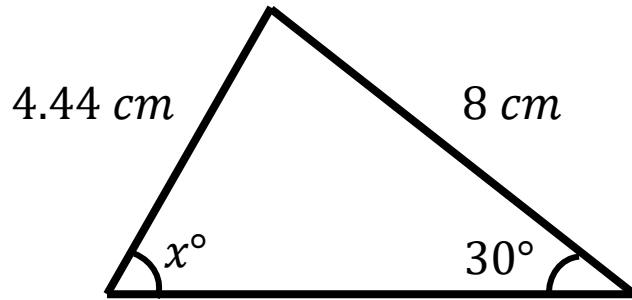
Find the value of x



$$x = 7.66 \text{ (2 dp)}$$

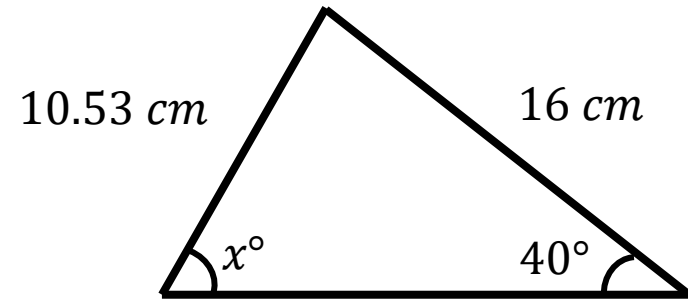
Worked example

Find the possible values of x



Your turn

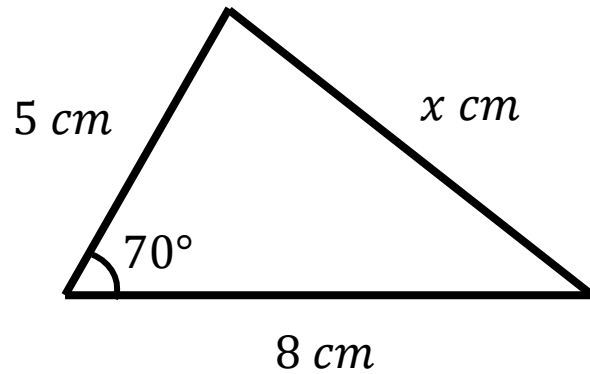
Find the possible values of x



$$x = 77.61^\circ \text{ or } 102.39^\circ$$

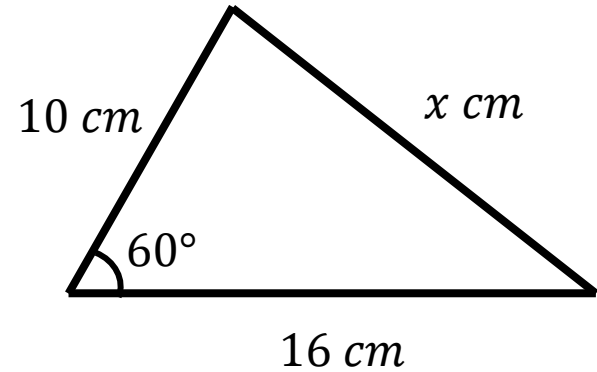
Worked example

Find the value of x



Your turn

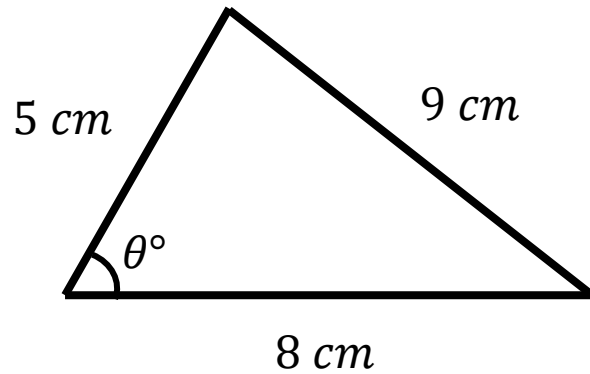
Find the value of x



$$x = 14 \text{ (2 dp)}$$

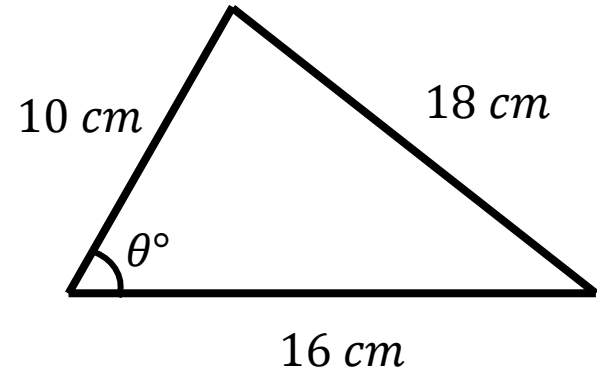
Worked example

Find the value of θ



Your turn

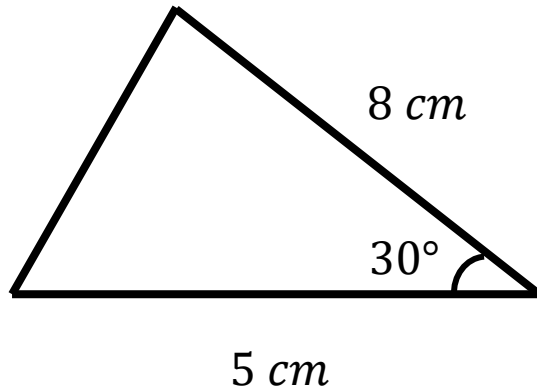
Find the value of θ



$$\theta = 84.26 \text{ (2 dp)}$$

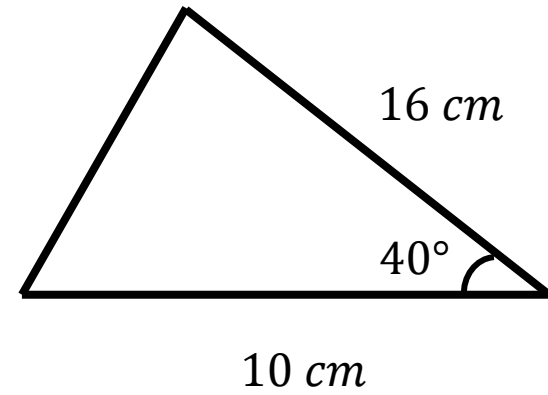
Worked example

Calculate the area of the triangle:



Your turn

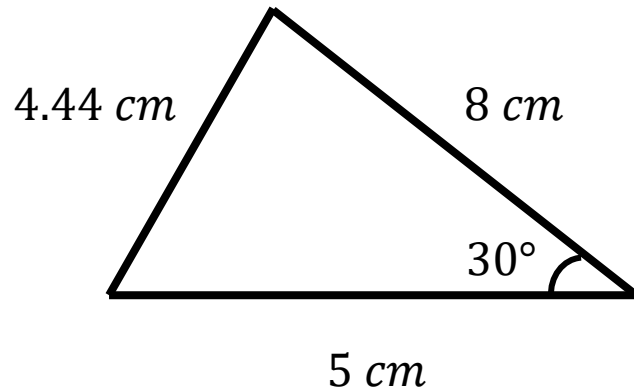
Calculate the area of the triangle:



51.42 cm^2 (2 dp)

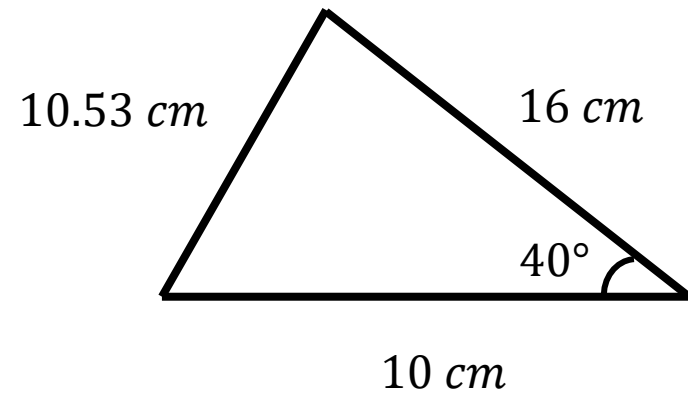
Worked example

Calculate the area of the triangle:



Your turn

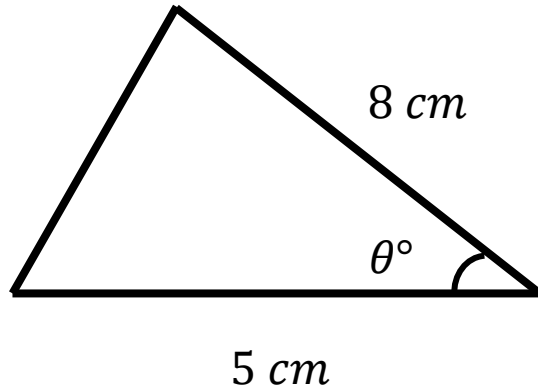
Calculate the area of the triangle:



51.42 cm^2 (2 dp)

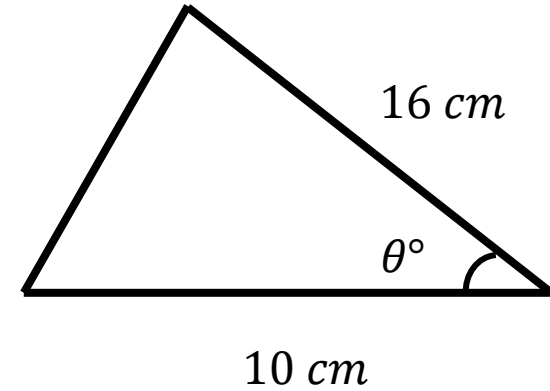
Worked example

The area is 10 cm^2
Calculate θ



Your turn

The area is 51.42 cm^2
Calculate θ



$$\theta = 40$$

Worked example

A triangle has sides 5.1 cm , 3.4 cm and 2.85 cm .
Work out the area of the triangle

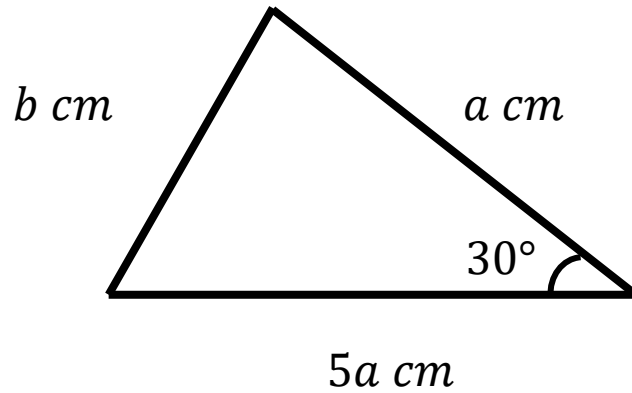
Your turn

A triangle has sides 10.2 cm , 6.8 cm and 5.7 cm .
Work out the area of the triangle

18.3 cm^2 (1 dp)

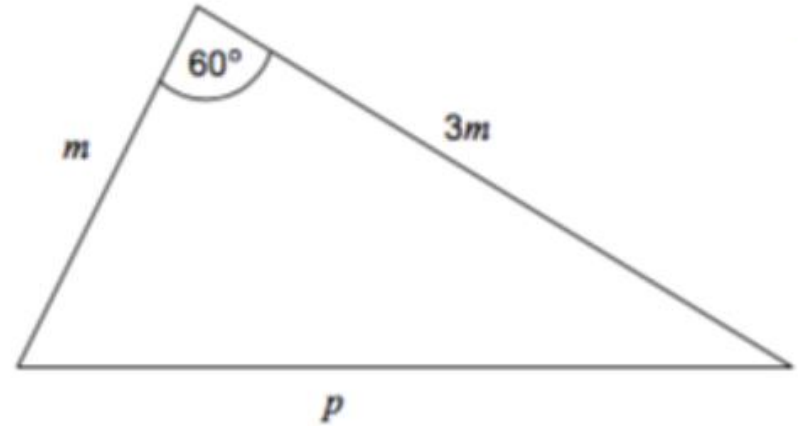
Worked example

Use the cosine rule to express b in terms of a



Your turn

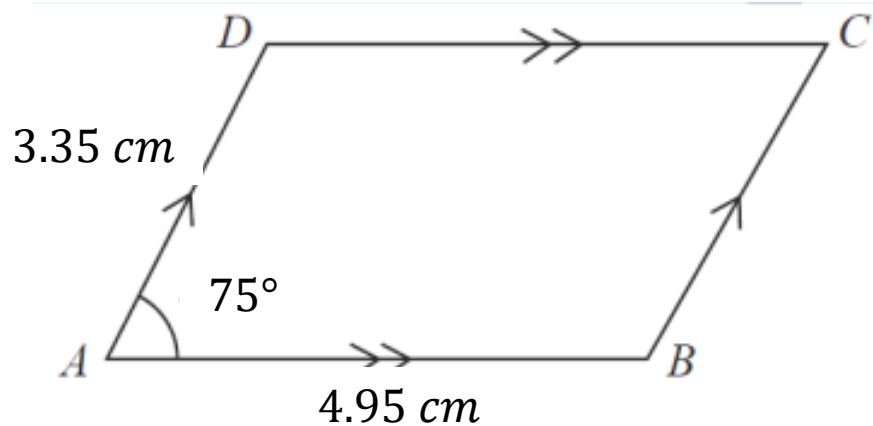
Use the cosine rule to express p in terms of m



$$p = m\sqrt{7}$$

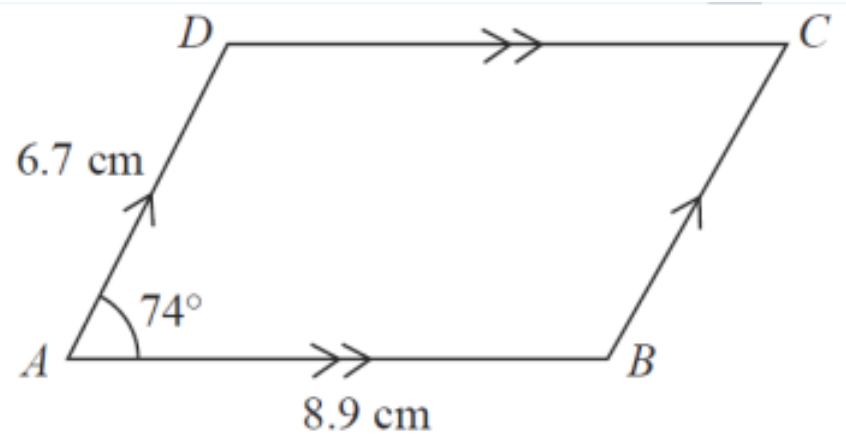
Worked example

Calculate the area of the parallelogram



Your turn

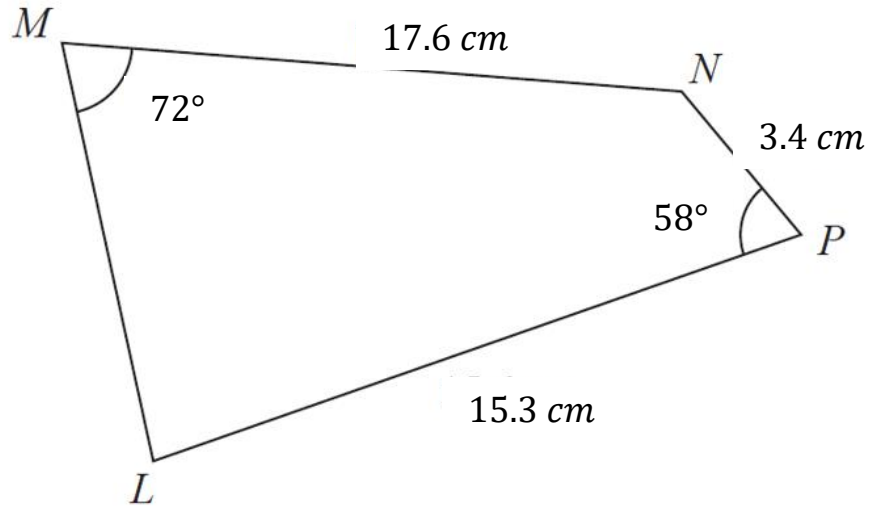
Calculate the area of the parallelogram



57.32 cm^2 (2 dp)

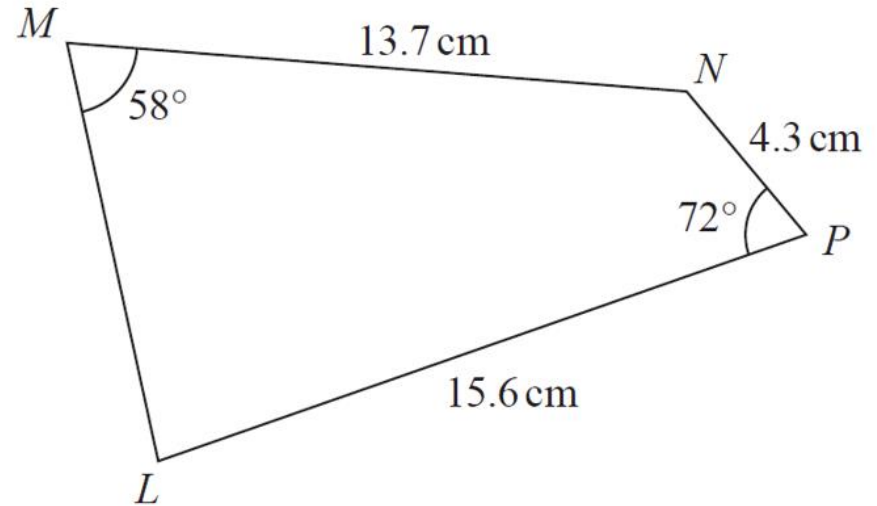
Worked example

Calculate the size of angle MLP



Your turn

Calculate the size of angle MLP



67.49° (2 dp)