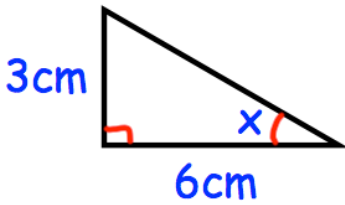


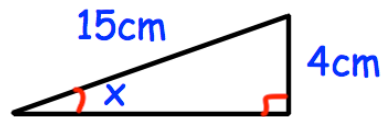
Workout

Question 1: Find the size of the missing angles in the triangles below.

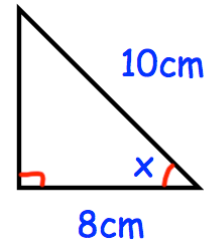
(a)



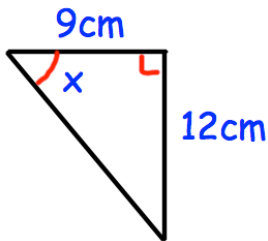
(b)



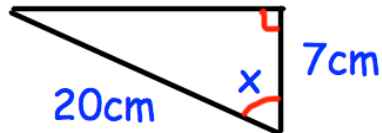
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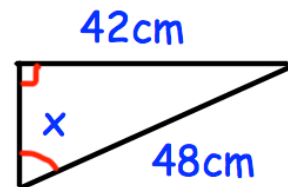
(d)



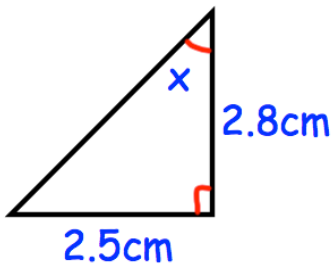
(e)



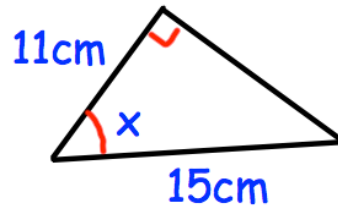
(f)



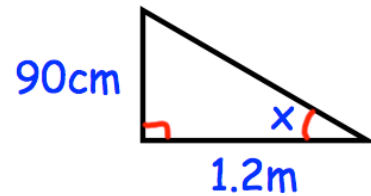
(g)



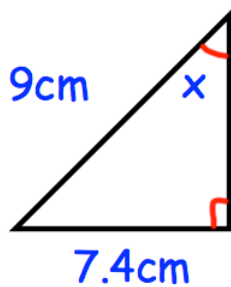
(h)



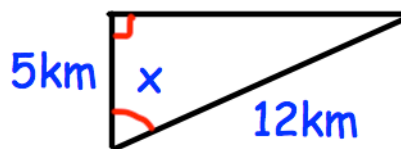
(i)



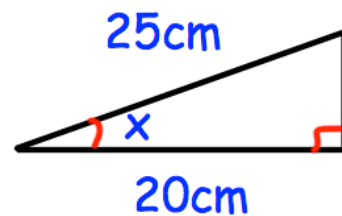
(j)



(k)



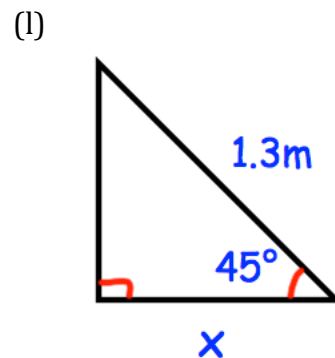
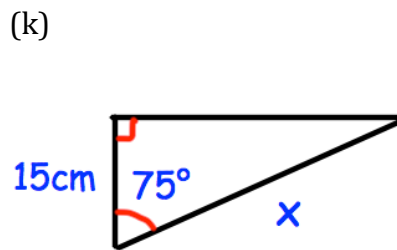
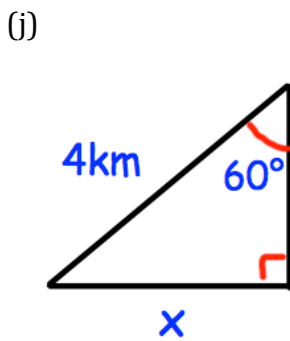
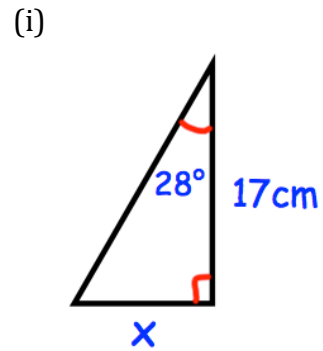
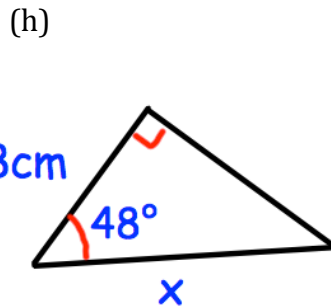
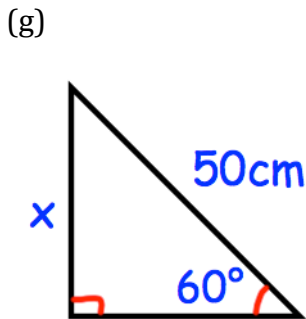
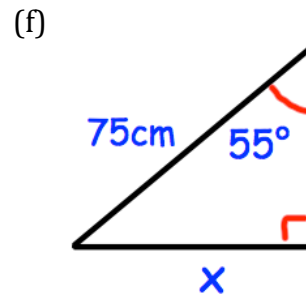
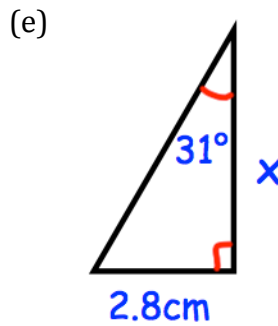
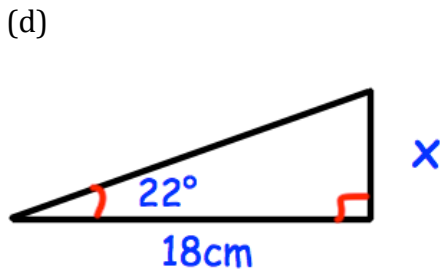
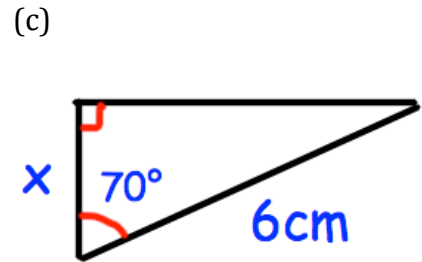
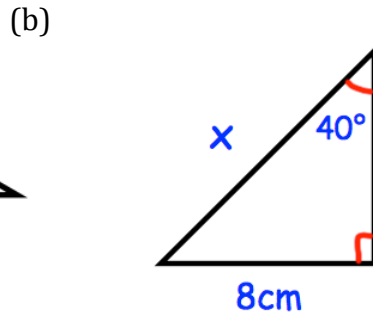
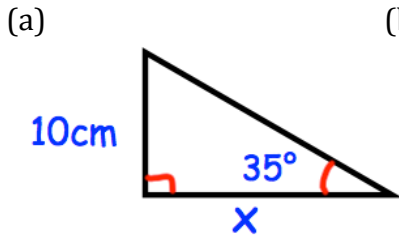
(l)



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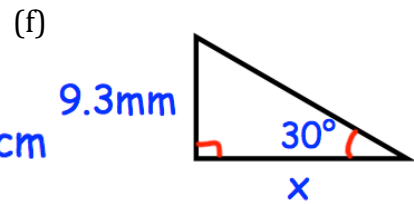
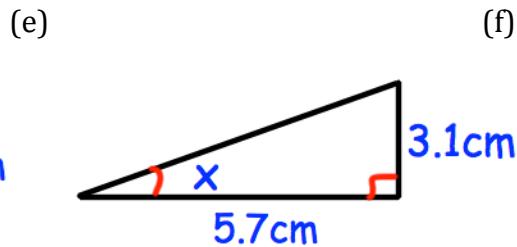
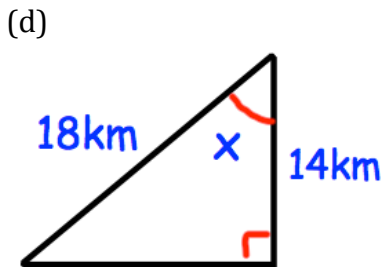
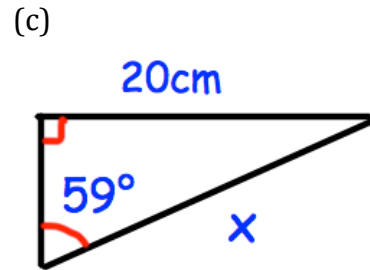
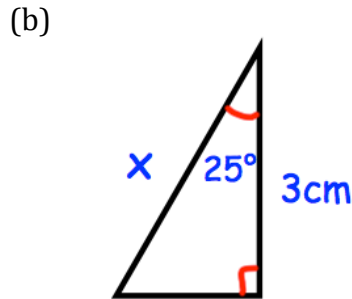
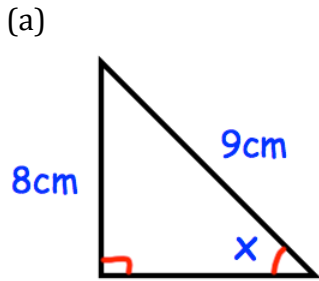
Question 2: Find the lengths of the sides labelled x below.



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Question 3: Find the size of the missing angles/sides labelled x below.



Apply

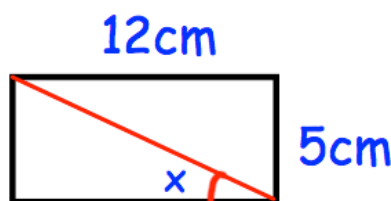
In each question, draw a diagram unless it has been given.

Question 1: A 4 metre long ladder is placed against a wall. The angle between the ladder and the ground is 75° . How far up the wall does the ladder reach?

Question 2: A 5 metre long ladder is placed against a wall. It reaches 4.3 metres up the wall. What is the angle between the ladder and the ground?

Question 3: A ladder is placed against a wall. The base of the ladder is 4 foot from the bottom of the ladder. The angle between the ladder and the ground is 80° . What is the length of the ladder?

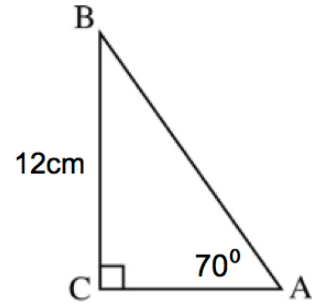
Question 4: A rectangle is 12cm long and 5cm wide. Find the size of the angle marked x.



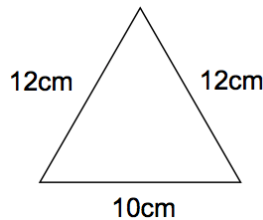
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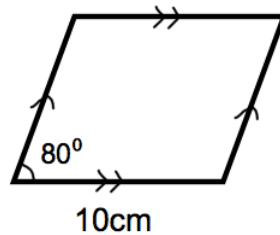
- Question 5: (a) Find the length of AC.
 (b) Find the length of AB.
 (c) Find the perimeter of triangle ABC.
 (d) Find the area of triangle ABC.



- Question 6: A helicopter leaves A and flies 40 miles due east. Then the helicopter flies 10 miles due south and arrives at B. Work out the bearing of B from A.
- Question 7: A boat leaves a port and sails 55km due west and then 30km due north and arrives at an oil rig. What is the bearing of the oil rig from the port?
- Question 8: Shown is an isosceles triangle. Calculate its area.

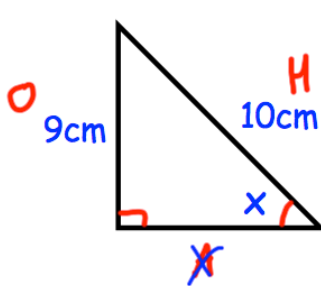


- Question 9: Shown is a rhombus of side length 10cm. Calculate its area.



- Question 10: Can you spot any mistakes in the question below?

Find the size of the angle x.



$$\begin{aligned} \sin x &= \frac{9}{10} \\ \sin x &= 0.9 \\ x &= \sin 0.9 \\ x &= 0.016^\circ \end{aligned}$$