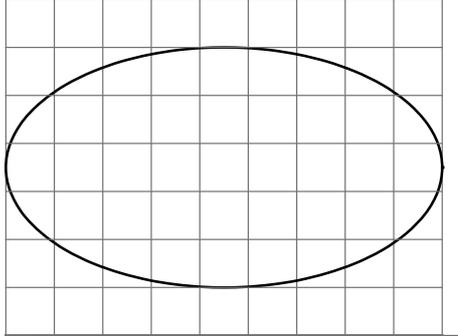
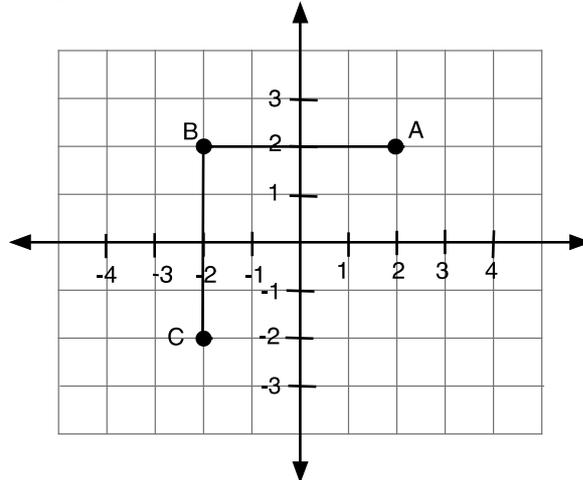


Area, Shape and Space

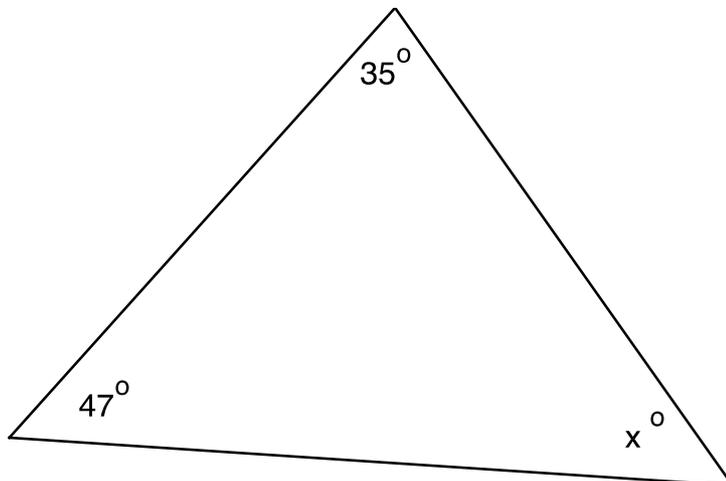
1. An oval is drawn on a cm square grid; find the approximate area of the oval.



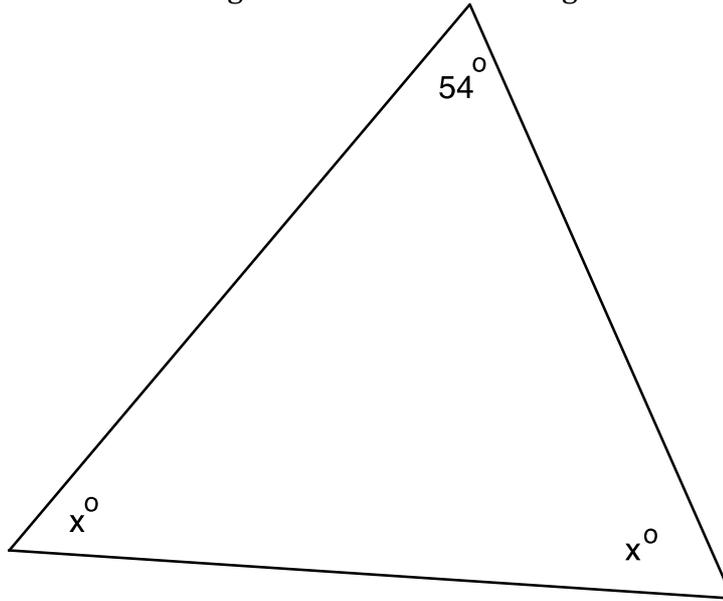
2. A, B and C form three corners of a square. What are the coordinates of the point D, which completes the square?



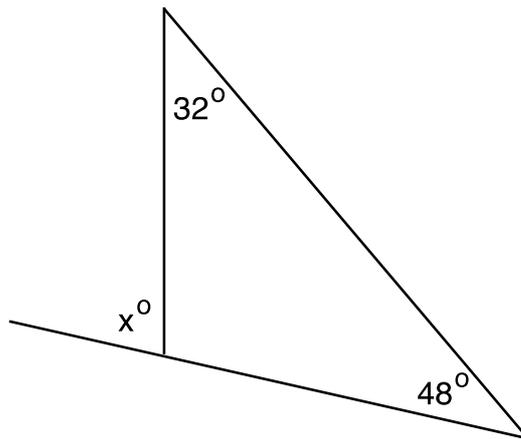
3. Calculate the size of the angle marked x in the triangle below



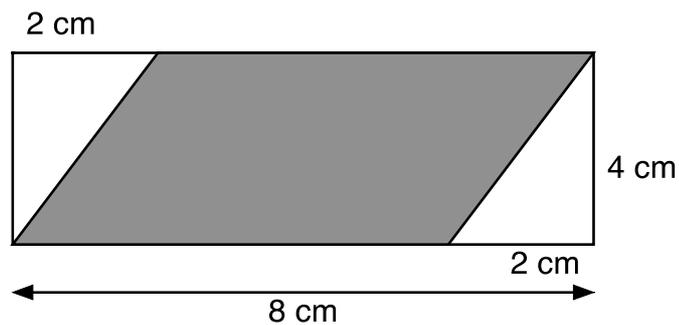
4. Calculate the size of the angle marked x in the triangle below



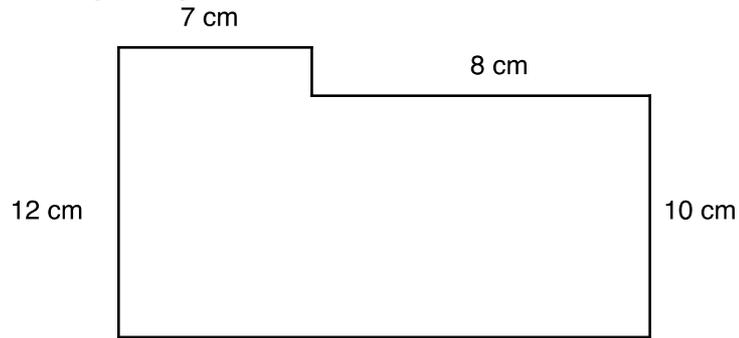
5. Calculate the size of the angle marked x in the triangle below



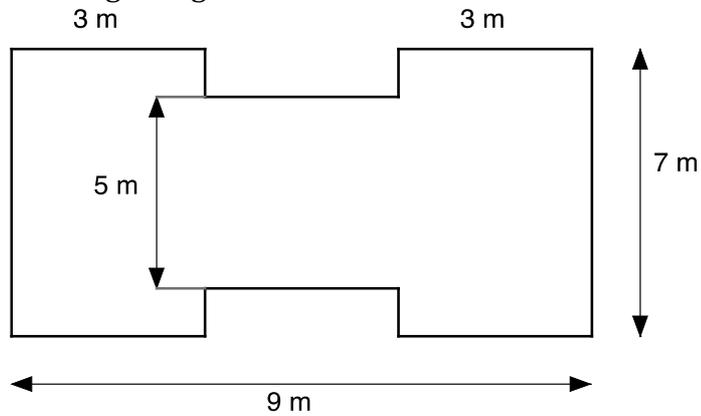
6. The diagram below shows a parallelogram contained within a rectangle.. Calculate the area of the parallelogram (the shaded portion of the diagram)



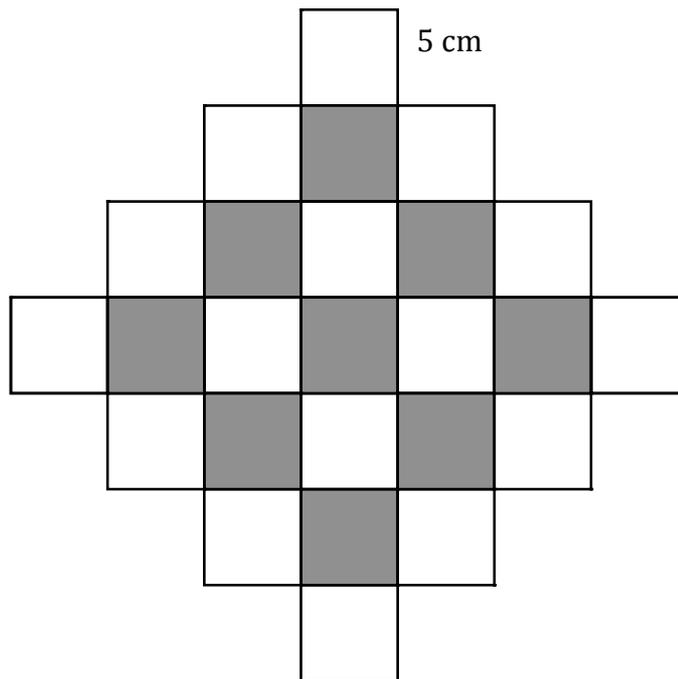
7. Calculate the perimeter and area of the shape below. All of the angles in the shape are right angles



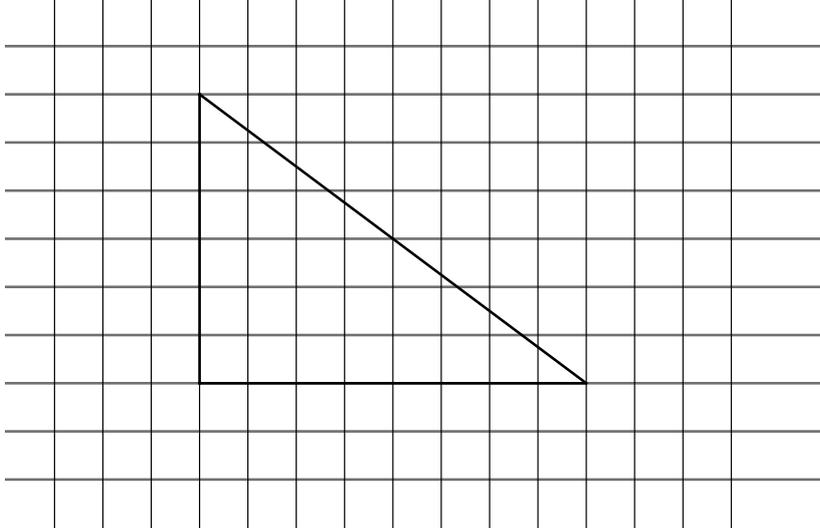
8. Find the area and perimeter of the shape below. All of the internal angles of the shape are right angles



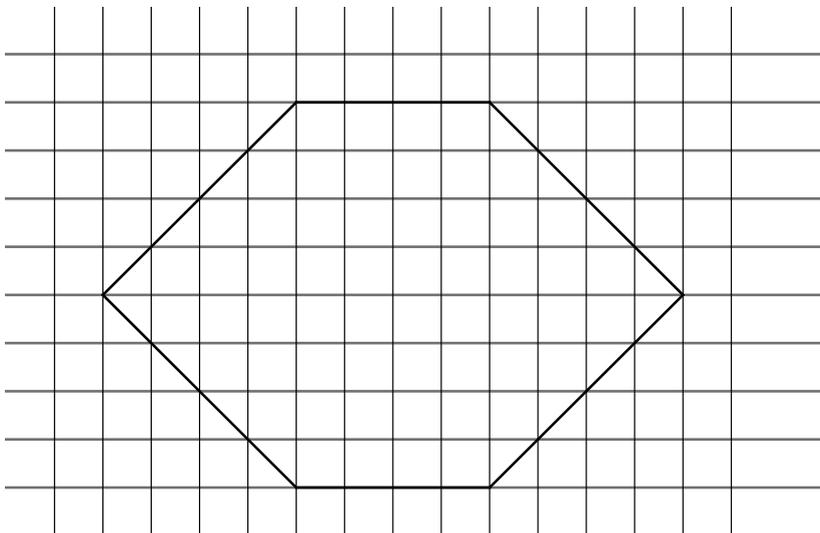
9. If each of the squares in the pattern below have sides of length 5 cm, find the area and perimeter of the entire pattern.



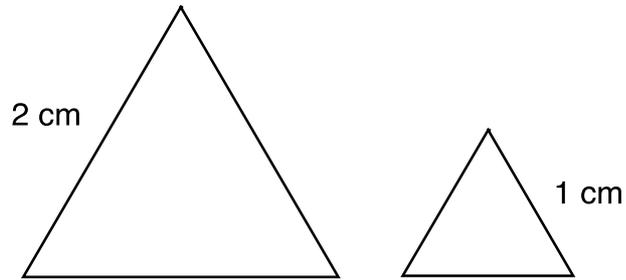
10. The diagram below shows a right-angled triangle drawn on a 1 cm square grid. Find the area of the triangle



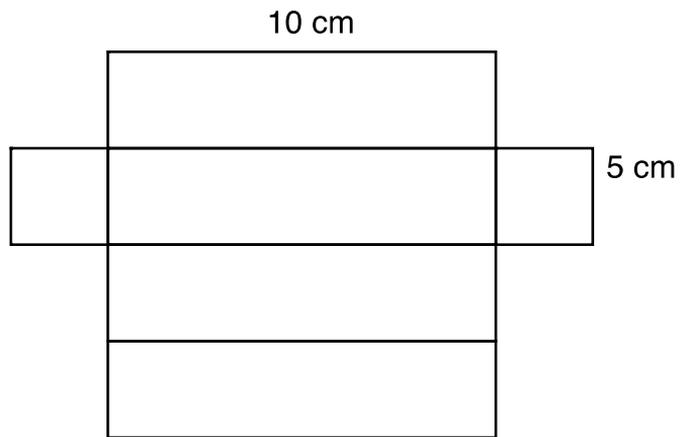
11. The diagram below shows a shape on a 2 cm square grid. Calculate the area of the shape



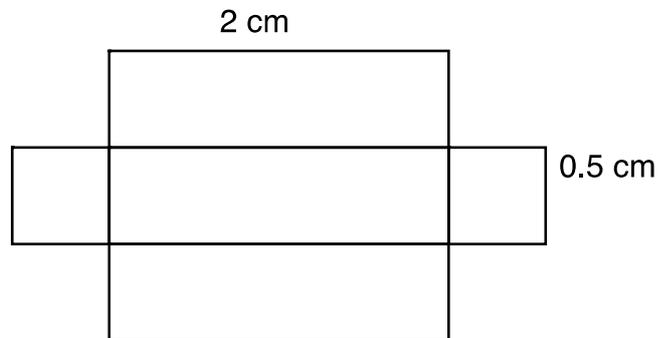
12. The diagram below shows two equilateral triangles. How many times will the smaller triangle fit into the larger triangle?



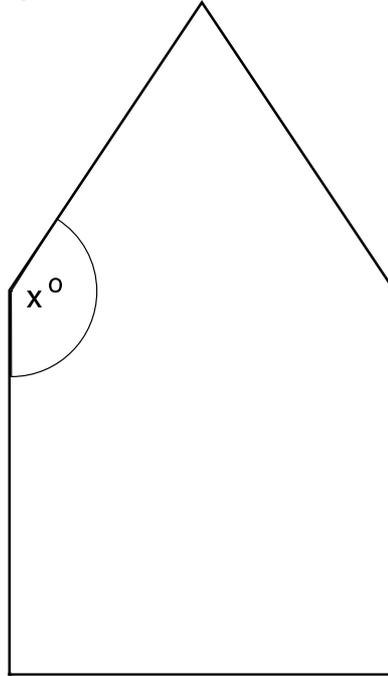
13. The diagram below shows net of a closed cuboid. Find the volume of the cuboid



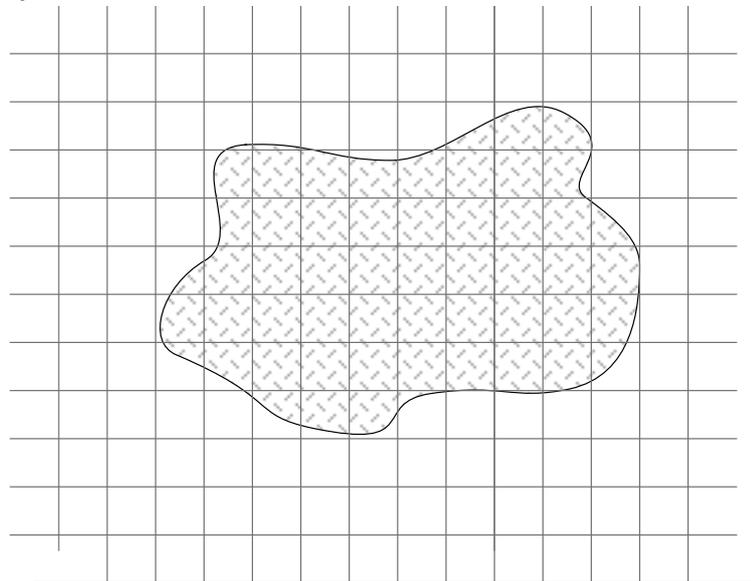
14. The net below is of an open cuboid container. What volume of liquid will the cuboid hold?



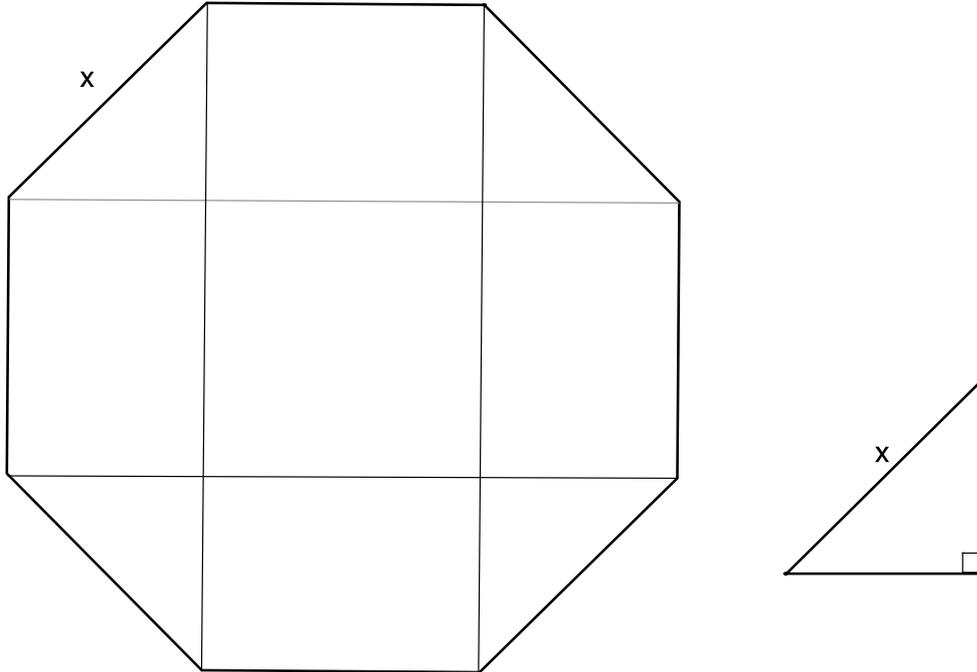
15. The diagram below shows an equilateral triangle mounted on a rectangle. Find the value of the angle marked x .



16. The diagram below shows a pond on a 1 m square grid. Estimate the area of the pond.



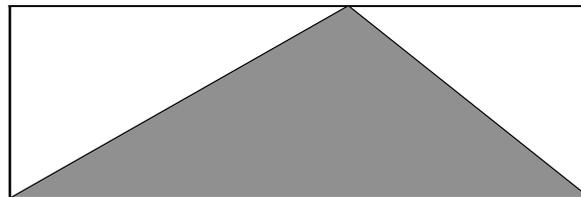
17. The sides marked x on the octagon and right-angled triangle are equal in length. How many times will the triangle fit into the octagon?



18. The area of a rectangle is 70 cm. Which of the following might be its perimeter;

- 7 cm 9 cm 12 cm 26 cm 34 cm?

19. The area of the rectangle below 15 cm^2 find the area of the triangle (the shaded portion of the diagram)



20. The perimeter of a rectangle is 24 cm. If the length of one of its sides is 10 cm, what is the area of the rectangle?

21. Tom buys 4 litres of water, 1 kg of potatoes and 0.5 kg of sugar. If the total weight of the shopping is 5.5 kg, find the weight of a litre of water.

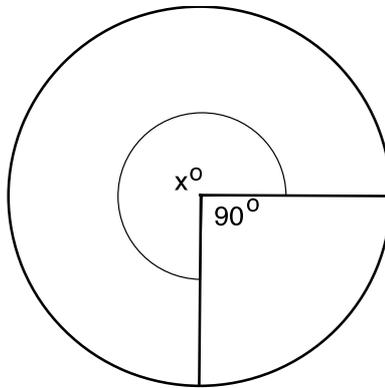
22. A tree is about six times as tall as the man standing next to it. Which of the following would be a good estimate for the height of the tree;

- 50 m 2000mm 40 cm 5 mm 12m?

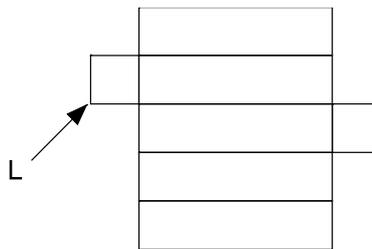
23. Which container will hold about 30 litres of water;

- a bath a sink a kettle a milk bottle an egg cup?

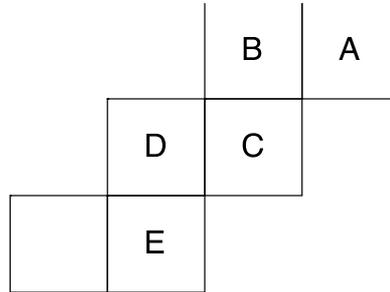
24. Find the measure of the angle marked x below



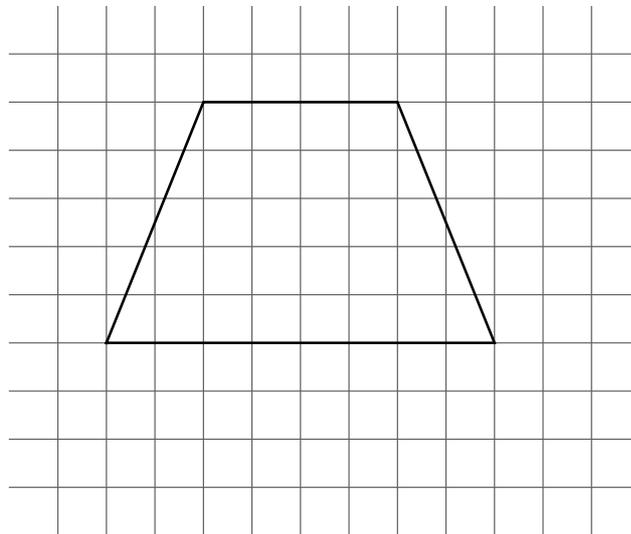
25. When the net below is folded it forms a closed cuboid. In the diagram, indicate the corner that will join to the corner labelled L



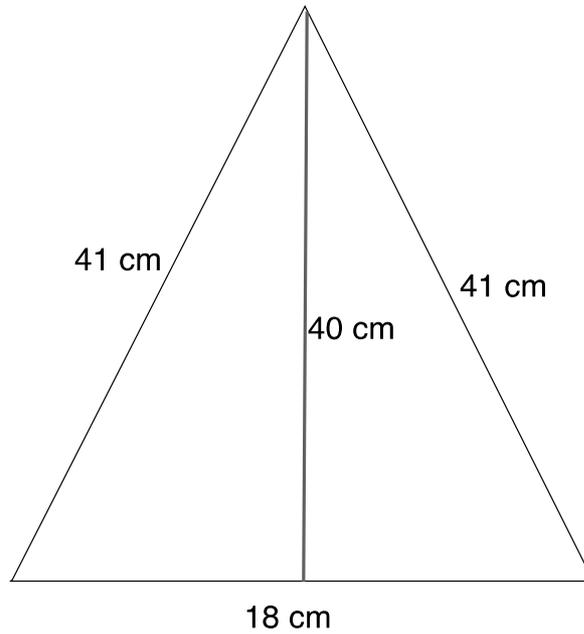
26. Look at the net of the closed cube below. Which side will be directly opposite the unmarked side when it is folded to make the cube?



27. In the diagram below, one square represents 10 cm^2 find the area of the trapezium.



28. What is the area of the triangle below?



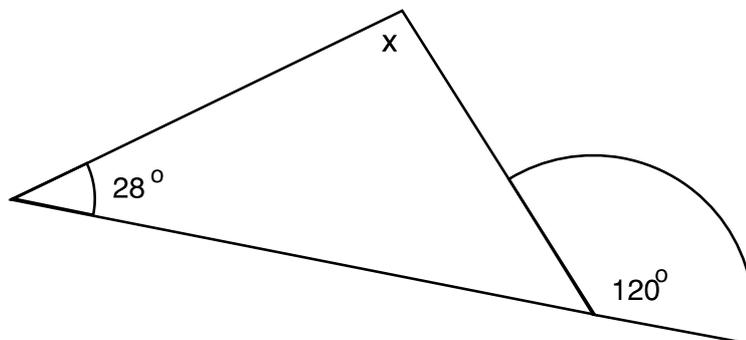
29. Jane is using a map where 1 cm represents 2 km. She plans a route of total length 16 cm on the map, how far is the actual journey?

30. The area of a rectangle is 30 cm^2 , which of the following might be its perimeter

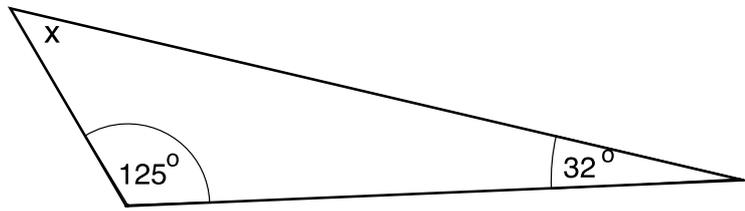
- 6 cm 9 cm 22 cm 12 cm 28 cm?

Can you come up with another possible value for the perimeter not contained in the list above?

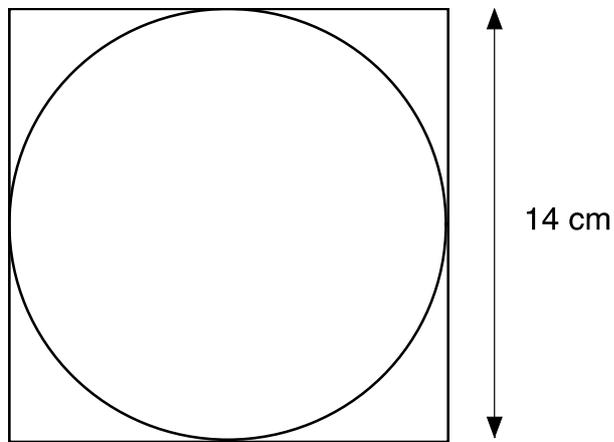
31. Find the value of the angle marked x in the diagram below.



32. Find the value of the angle marked x in the diagram below.



33. The diagram shows a circle inside a square. Find the area of the circle



34. Calculate the area of the triangle below. The diagram is not to scale

