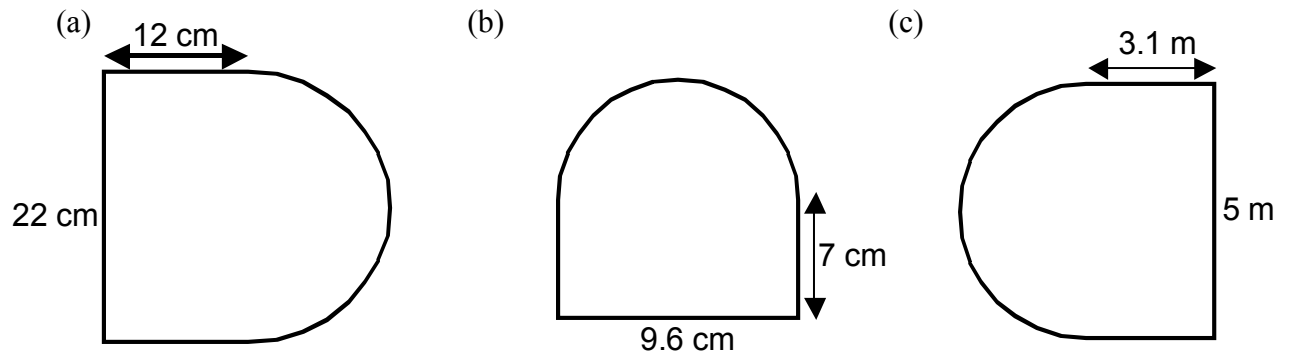
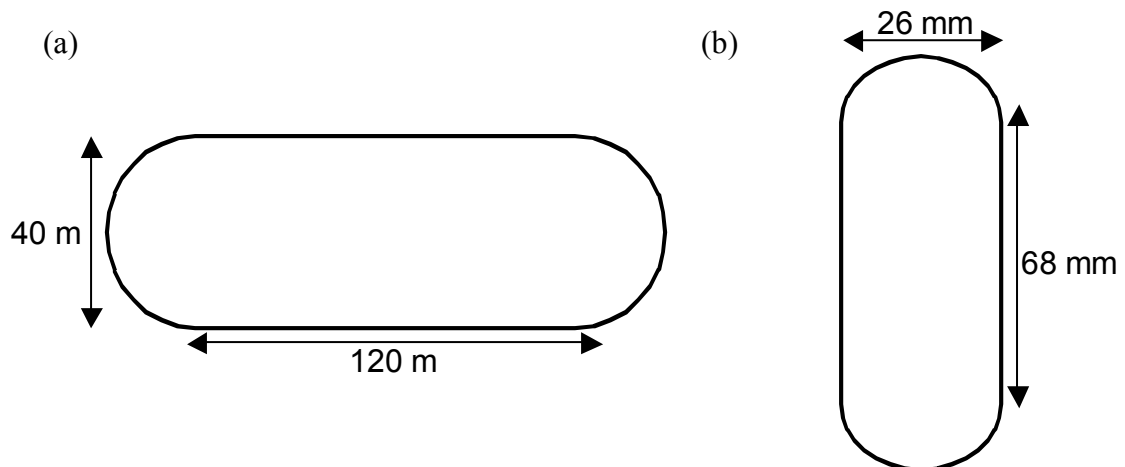


## Perimeter

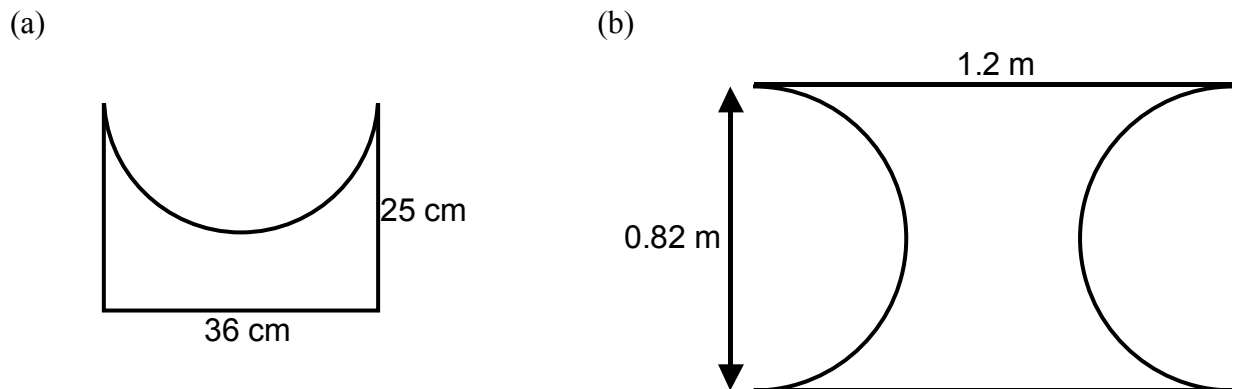
1. Each shape below consists of a rectangle and a semi-circle. Calculate the perimeter of each shape.



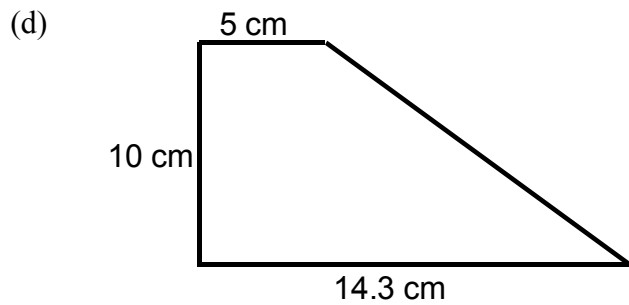
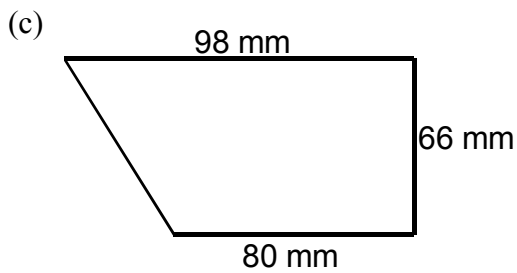
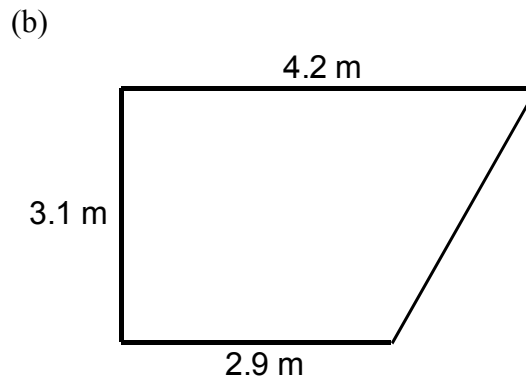
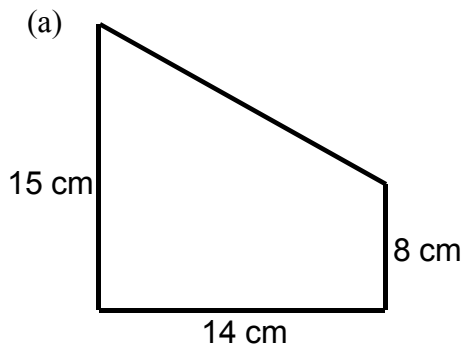
2. Each shape below is made up of a rectangle with semi-circular ends. Calculate the perimeter of each shape.



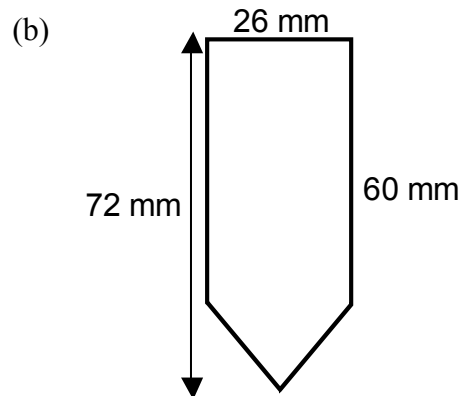
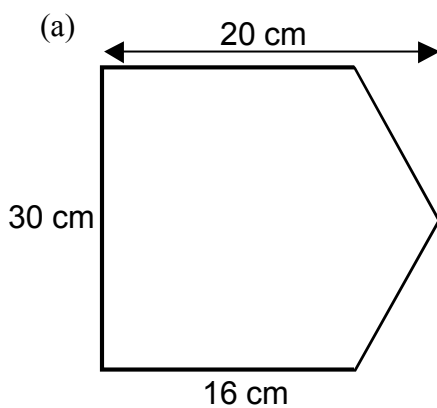
3. The shapes below are rectangular in shape with a semi-circle or semi-circles removed. Calculate the perimeter of each shape.



4. The shapes below consist of a rectangle and a right-angled triangle. Calculate the perimeter of each shape.



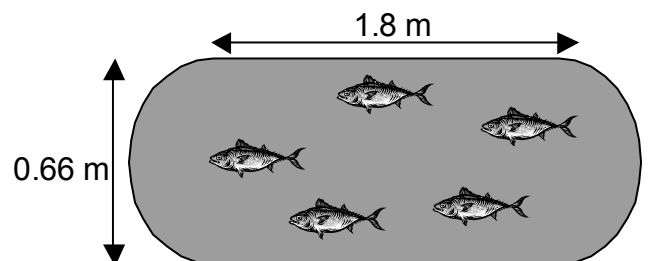
5. The shapes below consist of a rectangle and an isosceles triangle. Calculate the perimeter of each shape.



6. The diagram shows a small fish pond in the shape of a rectangle with semi-circular ends.

A low fence is to be put round the outside of the pond.

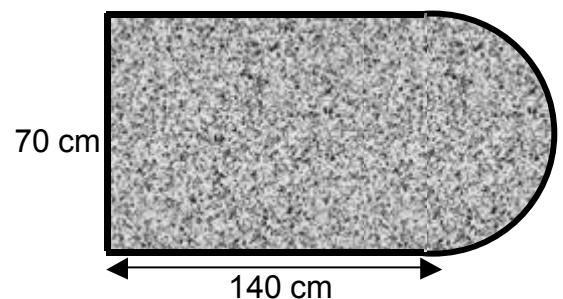
How long will the fence be?



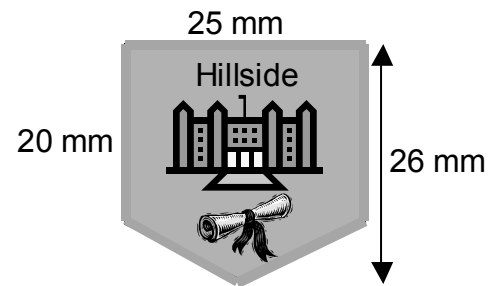
7. Nikki has a worktop in her kitchen in the shape of a rectangle with a semi-circular end.

The edging round the outside of the worktop is to be replaced.

Calculate the length of edging required.

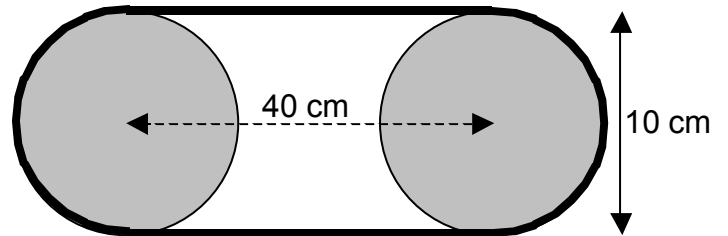


8. The diagram shows a badge for a school uniform.  
The edge of the badge has gold braid sewn round it.



Calculate the length of the gold braid.

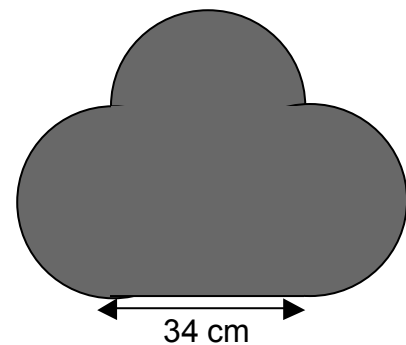
9. The diagram below shows the fan belt from a machine. The fan belt passes 2 wheels whose centres are 40 cm apart. Each wheel is 10 cm in diameter.



Calculate the total length of the fan belt.

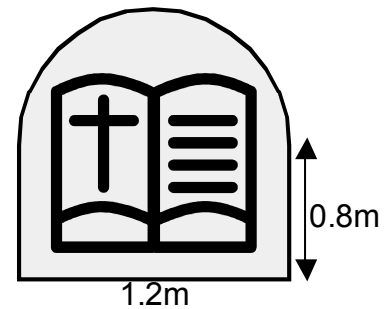
10. The diagram opposite is made up of 3 equal semi-circles with a flat base.

Calculate the perimeter of this shape.



11. The window in a church is rectangular in shape with a semi-circular top.  
The brass round the outside of the window is to be replaced.

Calculate the length of brass required.



12. The logo for a shop selling miniature soldiers is in the shape of a rectangle with triangles removed at each end.

Calculate the perimeter of this logo.

