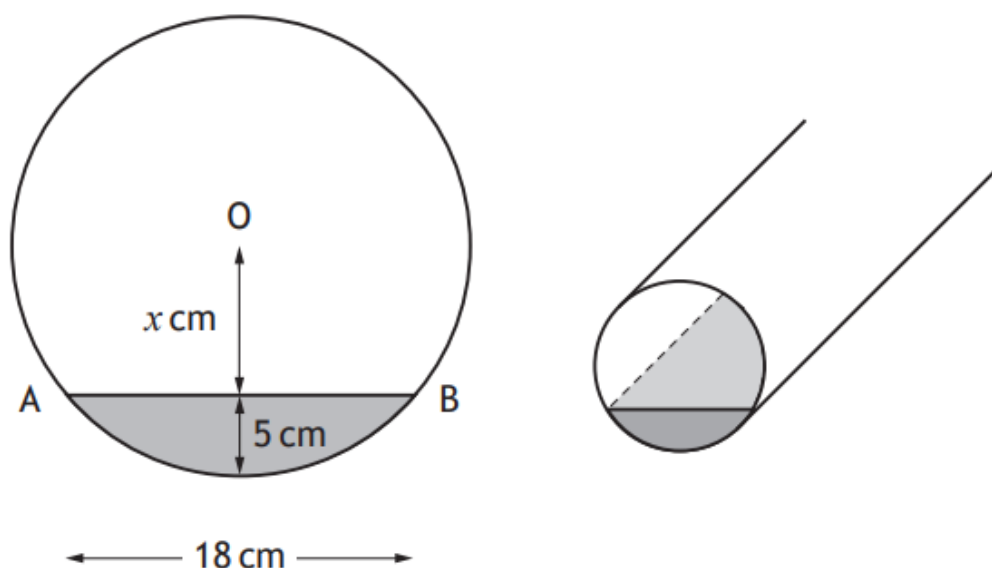


A cylindrical pipe has water in it as shown.



The depth of the water at the deepest point is 5 centimetres.

The width of the water surface, AB, is 18 centimetres.

The radius of the pipe is r centimetres.

The distance from the centre, O, of the pipe to the water surface is x centimetres.

- (a) Write down an expression for x in terms of r . 1
- (b) Calculate r , the radius of the pipe. 3

Answers:

- (a) $x = r - 5$
- (b) 10.6 cm