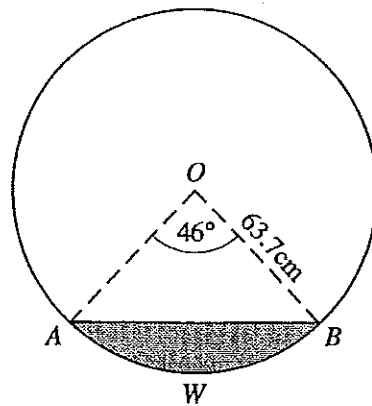


# IGCSE – Circle problems – arc/trig

2

Oct 01 Paper 4

NOT TO  
SCALE



The diagram shows the circular cross-section of a horizontal pipe.

The shaded area shows water lying in the pipe.

The circle, centre  $O$ , has a radius  $63.7$  cm and angle  $AOB = 46^\circ$ .

- (a) Calculate the arc length  $AWB$ . [3]
- (b) Calculate the length of the straight line  $AB$ . [3]
- (c) Calculate the length of the perpendicular from  $O$  to  $AB$ . [2]
- (d) Write down the greatest depth of water in the pipe. [2]

Give your answer correct to the nearest millimetre.