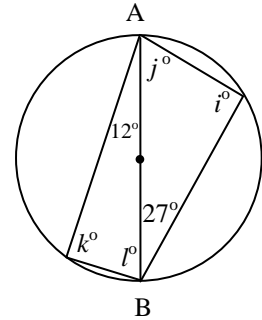
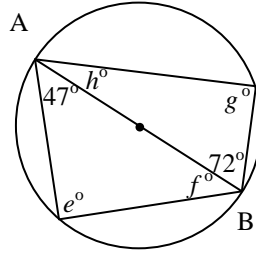
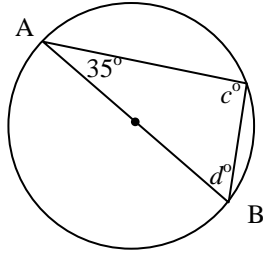
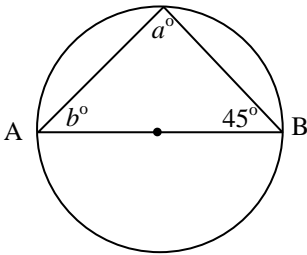


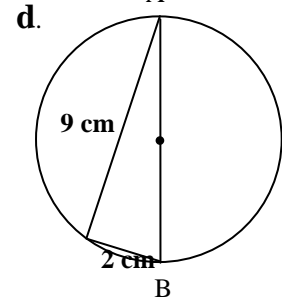
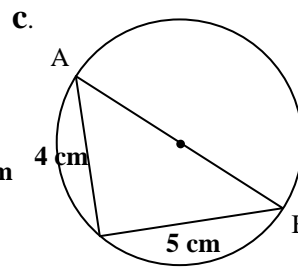
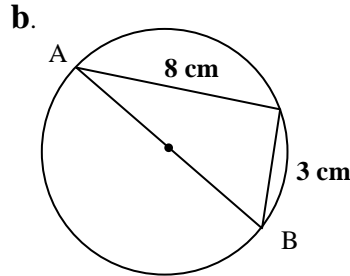
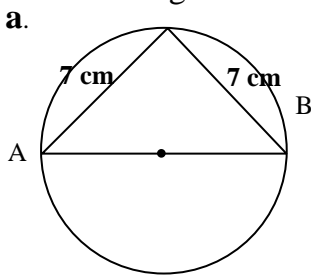
The Circle ~ Symmetry & Chords

M1 (Int2)

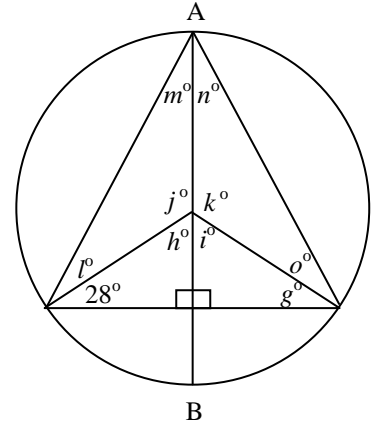
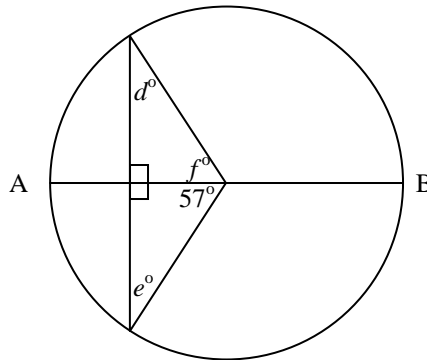
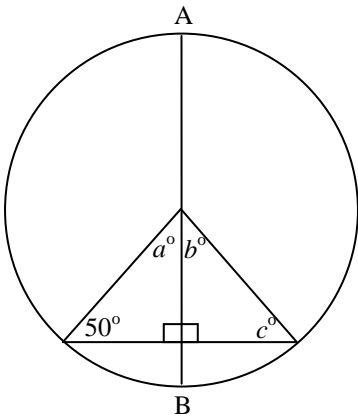
Q1. In each of the diagrams below AB is a diameter. Find the missing angles in each diagram.



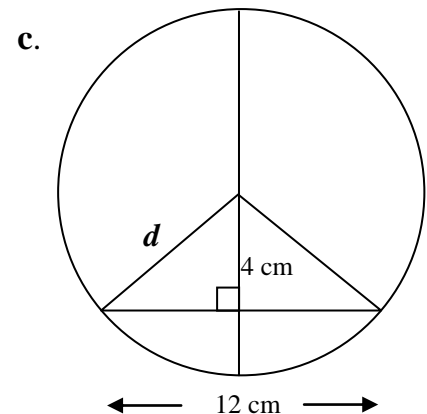
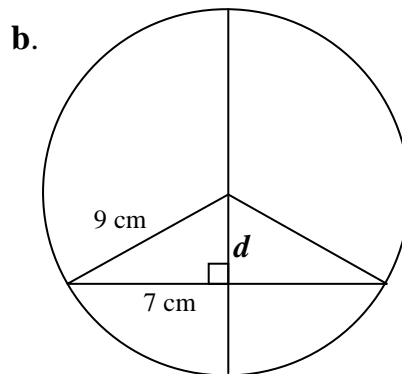
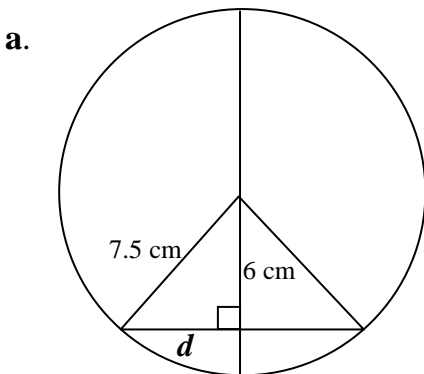
Q2. Find the length of the diameter AB in each of the circles below, given the other 2 sides of the triangle.

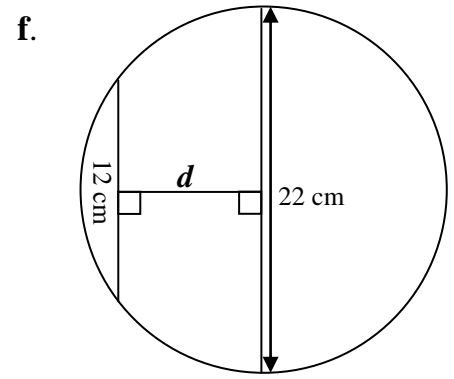
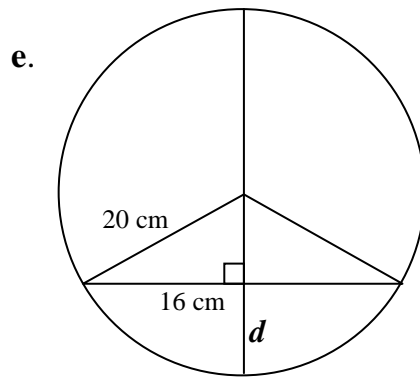
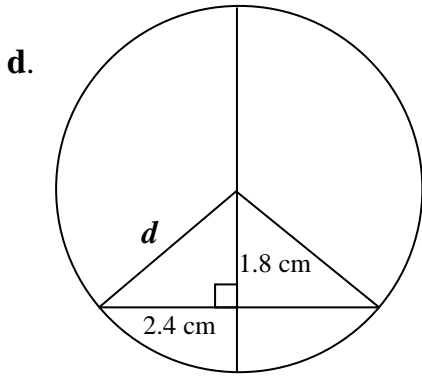


Q3. Use the symmetry properties of the circle to find the missing angles in the diagrams below. In each diagram AB is a diameter.

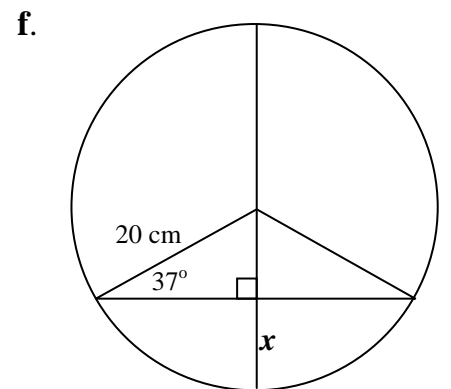
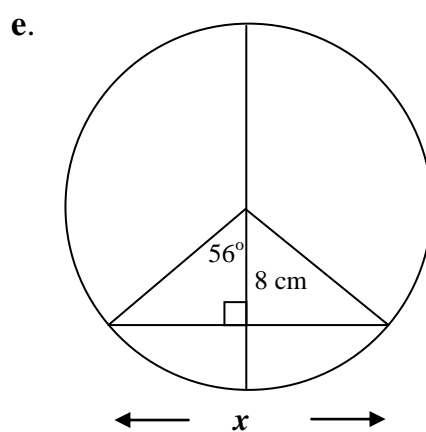
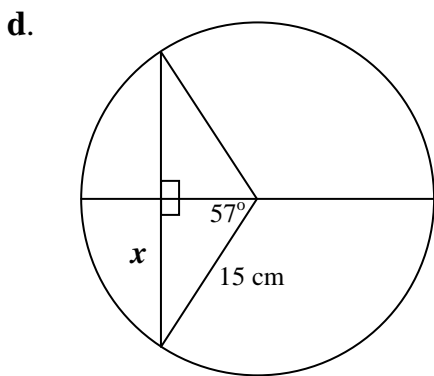
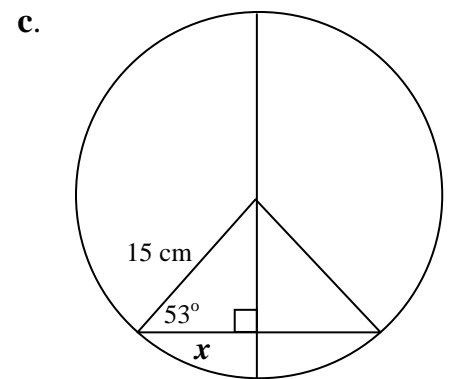
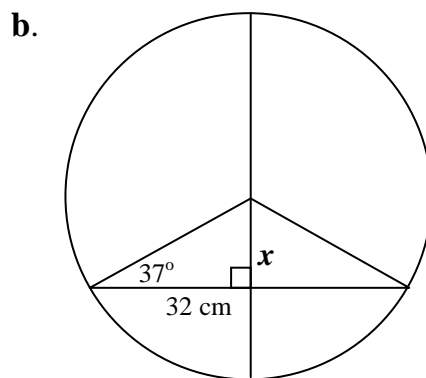
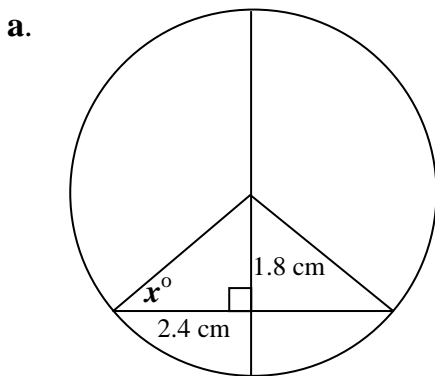


Q4. Calculate the length of *d* in each diagram.



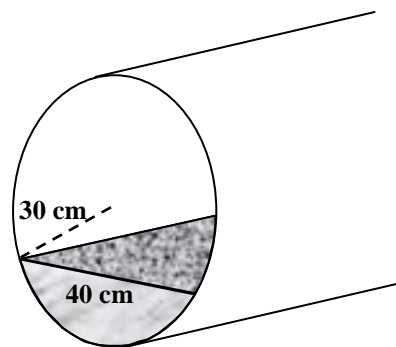


Q5. Find x in each of the triangles below.



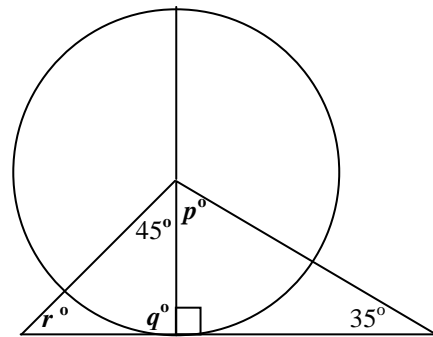
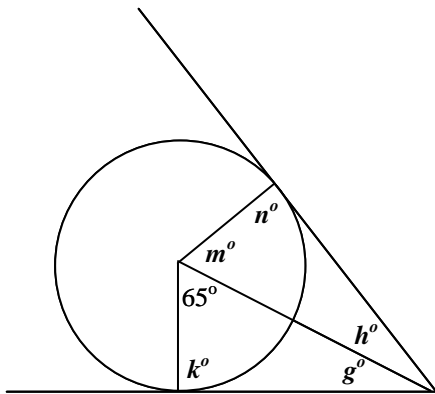
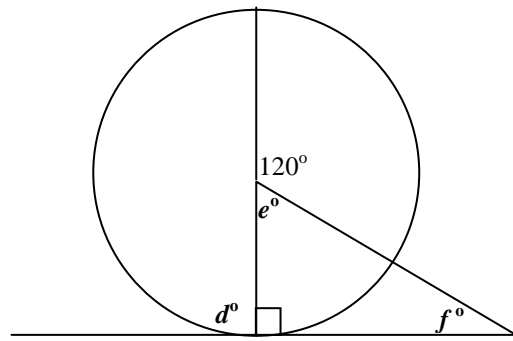
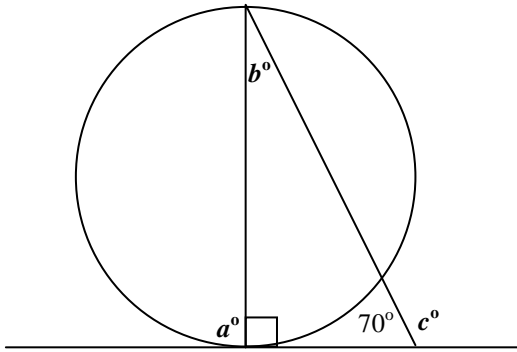
Q6. A cylindrical pipe is used to transport water underground.
The radius of the pipe is 30 cm and the width of the water surface is 40 cm.

Calculate the height of the pipe above the water.

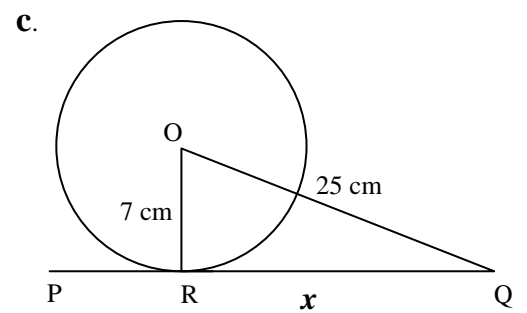
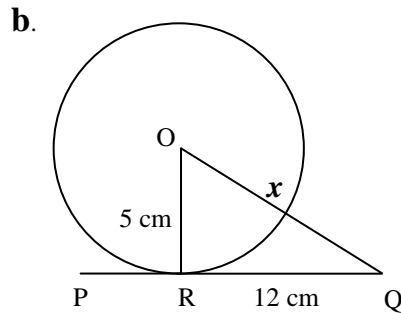
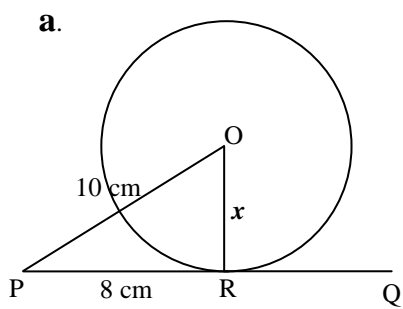


The Circle ~ Tangents & Angles

Q1. Calculate the sizes of the angles marked a , b , r , in the diagrams below.



Q2. In each of the diagrams below, PQ is a tangent which touches the circle at R. Calculate the lengths of the lines marked x .



Q3. In each of the diagrams below, AB is a tangent which touches the circle at C. Calculate x for each diagram.

