National 5 Homework: 1 year course
Properties of a Circle

1. Calculate the size of the angles marked $\mathrm{a}, \mathrm{b}$ and c in each diagram.

b

2. In the diagram PB is a tangent to the circle.

Calculate the size of angle BAC.

3. A swimming pool, in the shape of a semi-circle, has Diameter 15.9 metres.

Donald swan from A to P .
Sarah swam from $P$ to $B$.
How much further had Donald travelled than Sarah?

4. Sophie built a small tower, made of bricks, in her back garden. On top of it she fitted a large glass light-bulb holder.

The diagram shows it as part of a circle.
Centre, C , is 20 centimetres above the top of the wall.
Find the total height of the structure, H .


