1. Find:
a) the length of the minor arc
b) the length of the major arc
(i)

(ii)

2. In the diagrams $O$ is the centre of a circle. Calculate the area of each sector.
a)

b)

3. Calculate the area of the shaded section. $O A=10 \mathrm{~cm}, O B=12 \mathrm{~cm}$.

4. Calculate the angle $x^{0}$ for each
(i)


Minor arc $A B=12 \mathrm{~cm}$
(ii)


Area of major sector POQ
$=10.65 \mathrm{~cm}^{2}$

