## Circles


i. Name each of the following components of a circle highlighted in red

ii. Below is a diagram of a shaded portion of a circle. The circle has a radius of $4 \mathbf{c m}$ and the angle subtended by the shaded portion is $140^{\circ}$.


- What is fraction of the whole circle is shaded?
- What is the area of the shaded portion? Leave your answer in terms of $\pi$.
- What is the length of the arc subtended by the $140^{\circ}$ angle? Leave your answer in terms of $\pi$.
iii. A circle has a diameter of 12 cm . A sector of the circle has area $\frac{3 \pi}{4} \mathbf{c m}^{2}$. What is the angle that subtends the sector?

