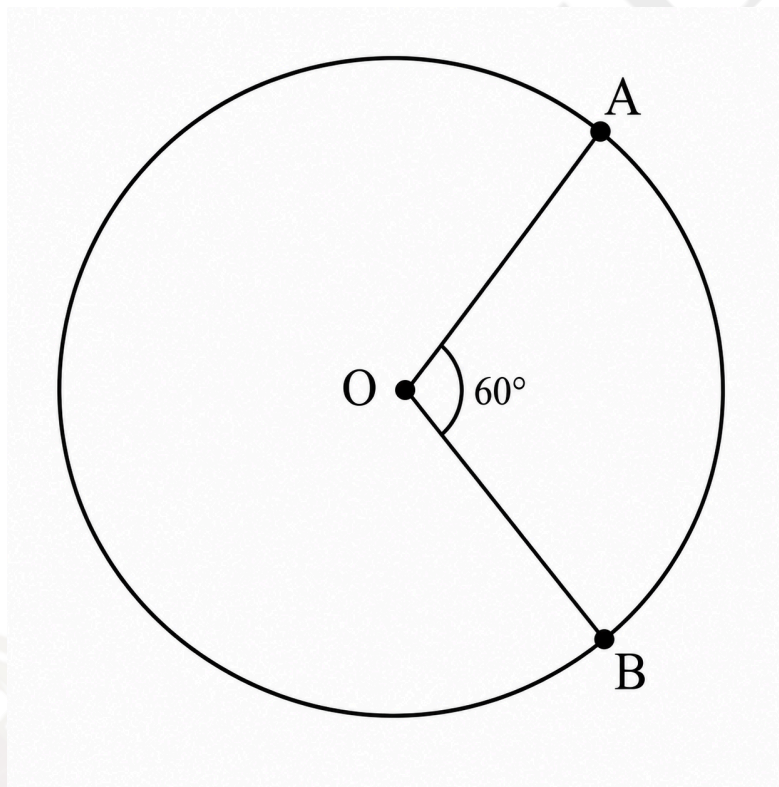


# Class 10 Mathematics - Areas Related to Circles

Name: \_\_\_\_\_

Date: \_\_\_\_\_

## Medium Worksheet 1



### Questions

1. Find the area of the sector if radius = 7 cm and  $\angle AOB = 60^\circ$ .
2. Find the length of arc AB.
3. What fraction of the complete circle does the sector represent?
4. If the angle becomes  $120^\circ$ , what fraction of the circle is the sector?

5. State the formula for the area of a sector.
6. State the formula for the length of an arc.

**Answer Key**

1. Area =  $(60/360) \times (22/7) \times 7 \times 7 = 25.67 \text{ cm}^2$
2. Arc Length =  $(60/360) \times 2 \times (22/7) \times 7 = 7.33 \text{ cm}$
3.  $1/6$
4.  $1/3$
5. Area of Sector =  $(\theta/360) \times \pi r^2$
6. Length of Arc =  $(\theta/360) \times 2\pi r$