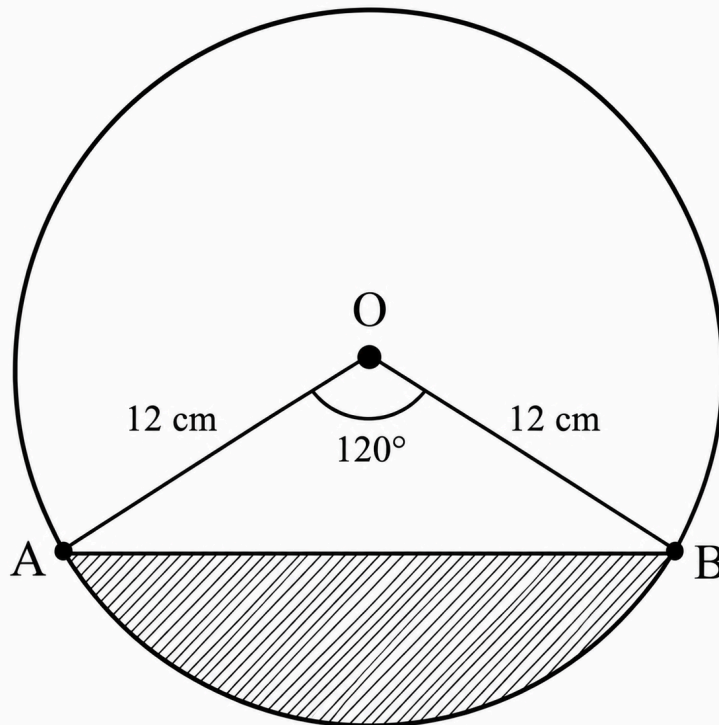


## Class 10 Mathematics - Areas Related to Circles

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

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

### Advanced Worksheet 2



### Questions

1. Find the area of the sector  $OAB$ .
2. Find the area of  $\triangle OAB$ .

3. Find the area of the corresponding segment.
4. If the angle subtended becomes  $240^\circ$ , which segment is obtained?
5. What is the area of the complete circle?
6. Find the area of the major segment.

**Answer Key**

1. Area of Sector =  $(120/360) \times 3.14 \times 12^2 = 150.72 \text{ cm}^2$
2. Area of  $\triangle OAB = (\sqrt{3}/4) \times 12^2 = 62.35 \text{ cm}^2$
3. Area of Segment =  $150.72 - 62.35 = 88.37 \text{ cm}^2$
4. Major Segment
5. Area of Circle =  $452.16 \text{ cm}^2$
6. Area of Major Segment =  $452.16 - 88.37 = 363.79 \text{ cm}^2$