

NAME \_\_\_\_\_

DATE \_\_\_\_\_

**AREA OF CIRCLE AND AREA OF SECTOR OF A CIRCLE**

Complete the following by filling in the values.

1. Find the area of a circle of diameter 196 mm. [use  $\pi = \frac{22}{7}$ ]

**Solution:****Using**

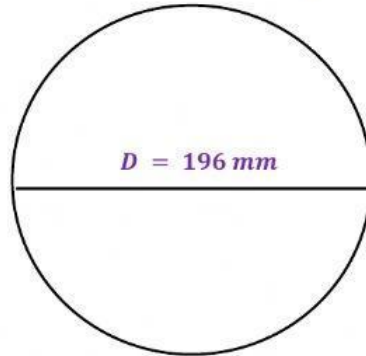
$$A = \frac{\pi D^2}{4}$$

$$A = \frac{22}{7} \times \frac{\quad^2}{4}$$

$$A = \frac{22}{7} \times \frac{\quad}{4} \times \frac{196}{1}$$

$$A = 22 \times \quad \times 196$$

$$= \quad \text{mm}^2$$



2. Calculate the area of a circle given a radius of 35 cm.

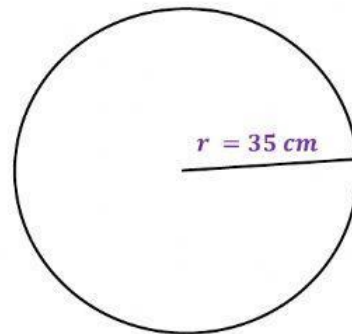
**Solution**

$$A = \pi r^2$$

$$A = \frac{22}{7} \times \frac{\quad^2}{1}$$

$$A = 22 \times \quad \times \quad$$

$$= \quad \text{cm}^2$$



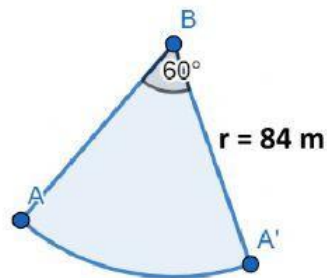
3. Calculate the area of the sectors shown.

**Solution: Using  $A = \pi r^2 \frac{\theta}{360^\circ}$** 

$$A = \frac{22}{7} \times \quad \times \frac{\quad^\circ}{360^\circ}$$

$$A = \quad \times \quad \times \quad \times \frac{1}{6} = \quad$$

$$= \quad \text{m}^2$$

**4. Solution: Using  $A = \pi r^2 \frac{\theta}{360^\circ}$** 

$$A = \frac{22}{7} \times \quad \times \frac{\quad^\circ}{360^\circ}$$

$$A = \quad \times \quad \times \quad \times \frac{7}{12} = \quad$$

$$= \quad \text{cm}^2$$

