

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**

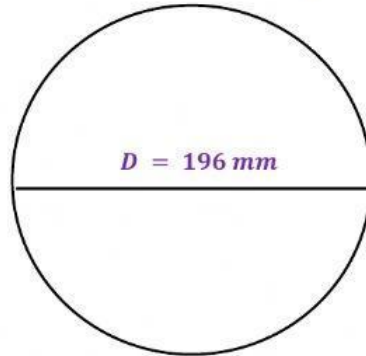
$$A = \frac{\pi D^2}{4}$$

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

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

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

$$= \quad mm^2$$



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

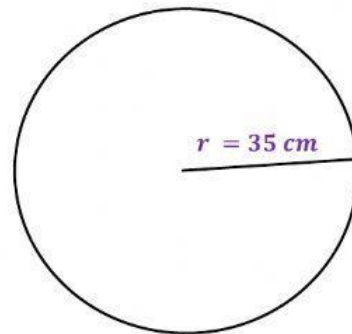
Solution

$$A = \pi r^2$$

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

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

$$= \quad cm^2$$



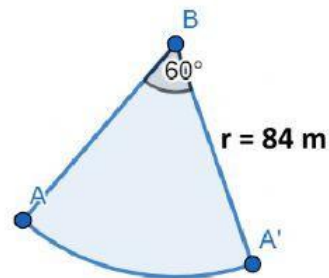
3. Calculate the area of the sectors shown.

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

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

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

$$= \quad m^2$$

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

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

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

$$= \quad cm^2$$

