

Q.6a - Radius of cylinder is 8cm and height is 15cm. Find its volume.

Sol:- Radius of cylinder = $r = 8\text{cm}$
Height of cylinder = $h = 15\text{cm}$
Volume of cylinder = $V = ?$

$$V = \pi r^2 h$$

$$= \frac{22}{7} \times (8)^2 \times (15)$$

$$= \frac{22}{7} \times 64 \times 15$$

$$= \frac{22}{7} \times 960$$

$$\text{Volume} = 3017.142\text{cm}^3$$

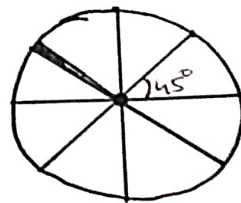
6b - Al Aqsa Mosque in Jerusalem has a dome of rock in regular octagonal shape. What will be the angle of each side?

Sol:- A regular octagon is a geometrical figure having eight sides and eight angles in an enclosed position.

In a regular octagon every side has an angle of 45° .

$$45^\circ \times 8 \text{ sides} = 360^\circ \text{ Octagon}$$

Hence, each angle of regular Octagon is 45° .



6c - Maximum length and depth of Dal lake in Srinagar is 4.6 mile and maximum width is 2.2 mile. Find surface area of lake?

Sol:- Length of Dal lake = 4.6 mile

Width of Dal lake = 2.2 mile

Area of lake = ?

$$\text{Area of lake} = \text{length} \cdot \text{width}$$

$$= 4.6 \times 2.2$$

$$= \boxed{10.12 \text{ miles}}$$

7c] A tablet contains 30mg of medication. How many tablets will be needed to provide Ms. Smith with 240mg medication?

Sol: One tablet contains medication = 30mg
How many tablets contain medication = 240mg

$$30 \text{ mg} = 1 \text{ tablet}$$

$$240 \text{ mg} = \frac{240 \times 1}{30}$$

Ms. Smith ^{needs} 8 tablets to provide 240mg.