Right Circular Cylinder

A. Choose the correct answer:			
1. The volume of a right circular cylinder is given by:			
ā	a) πr²h	b) 2πr²h	
C	c) πr³h	d) 2πrh	
2. The curved surface area (CSA) of a right circular cylinder is:			
â	a) 2πr²	b) πr²h	
C	:) 2πrh	d) πr³h	
3. The total surface area (TSA) of a right circular cylinder is:			
a	a) 2πr² + 2πrh	b) 2πr²h	
C	:) πr² + 2πrh	d) 2πrh	
4. I	4. If the height of a cylinder is doubled and the radius remains the same, its		
١	volume:		
â	a) Doubles	b) Triples	
C	c) Halves	d) Remains the same	
5. I	5. In the formula for curved surface area, π stands for:		
ā	a) 2	b) $\frac{22}{7}$	
C	:) 3	d) $\frac{7}{22}$	
B. Wr	B. Write the Missing Terms to Complete the Sentences:		
1. \	/olume of a cylinder =	_ × radius² × height	
2. 0	Curved surface area of a cylinder =	= × radius × height	
3. ⁻ k	3. Total surface area of a cylinder = curved surface area + of two bases		
4. 1	he two circular faces of a cylinde	r are and	
5. ເ	5. Unit of volume is expressed in units		
C. Fig	C. Figure out the answers to these questions:		
1. F	1. Find the volume of a cylinder with radius 7 cm and height 10 cm		
2. F	2. Find the curved surface area of a cylinder with radius 5 cm and height 8 cm		

- 3. Calculate the total surface area of a cylinder of radius 4 cm and height 9 cm
- 4. If the volume of a cylinder is 880 cm³ and height is 10 cm, find the radius

5. Find the height of a cylinder if its curved surface area is 176 cm² and radius is 7 cm

D. Mark each sentence with a True (\checkmark) or False (X):

- 1. The formula for the volume of a cylinder is πr^2h .
- 2. Curved surface area of a cylinder depends on radius and height. _____
- 3. The total surface area includes only the curved surface.
- 4. The height of a right circular cylinder is the distance between its two circular bases. _____
- 5. Curved surface area of a cylinder is $2\pi r^2$.

E. Challenge yourself with these questions:

- 1. Find the volume of a cylinder whose radius is 3.5 cm and height is 12 cm.
- 2. Find the curved surface area of a cylinder with radius 14 cm and height 6 cm.
- 3. Calculate the total surface area of a cylinder with radius 10 cm and height 15 cm.
- 4. Find the volume of a cylinder whose diameter is 10 cm and height is 21 cm.
- 5. A cylinder has a volume of 616 cm³ and height 8 cm Find its radius.