Edulyte

CYLINDER

The cylinders definition is a three-dimensional shape. It has two parallel circular bases, and the joining of the shape is a curved safe. In geometry, the center of the circular bases overlaps each other, which helps to form a right cylinder. The line segment joining the two centers of the cylinder is the axis, and it denotes the height of the cylinder. A cylinder is a perfect 3D geometrical shape, a prism with a circle in its base. A cylinder is a perfectly upright shape with special structures in it.

Read more

Q1: What is the volume of a cylinder with a radius 'r' and height 'h' if 'r' = 5 cm and 'h' = 10 cm?

A: 50 cm^3
B: 100 cm^3
C: 250 cm^3
D: 785.71 cm^3

Q2: If the radius of a cylinder is doubled while keeping the height constant, how does the volume change?

A: It becomes four times larger.
B: It becomes twice as large.
C: It remains the same.
D: It becomes half as large.

Q3: How many edges does a cylinder have?

A: 2
B: 4
C: 6
D: 8

Q4: Identify the formula for calculating the surface area of a cylinder

A: $2\pi r^2$ h×r
B: $2\pi r$ (h+r)
C: h + r^2h
D: $2hr^2$

Q5: Identify the formula for calculating the volume of a cylinder

A: πr
B: πr^2
C: πr^2h
D: $\Pi r^2 2h$

Q6: What are the units to express the volume of a cylinder?

A: Single units
B: Square units
C: No units
D: Cubic units

Q7: What are the units to express the surface area of a cylinder?

A: Square units
B: Single units
C: Cubic units
D: No units

Q8: What is the surface area of a cylinder with a radius 'r' and height 'h' if 'r' = 15 cm and 'h' = 30 cm?

A: 4041 cm^2
B: 4242.86 cm^2
C: 4242.86 cm^3
D: 4041 cm^3

Q9: What is the volume of a cylinder with a radius 'r' and height 'h' if 'r' = 3 cm and 'h' = 12 cm?

A: 344.54 cm^2
B: 339.43 cm^2
C: 339.43 cm^3
D: 344.54 cm^2

Q10: Calculate the curved surface area of a Cylinder with a radius of 5 cm

A: 31.43 cm
B: 30.54 cm
C: 33.43 cm
D: 54.67 cm

Answers

Q1: D - 785.71 cm^3

Q2: A - It becomes four times larger.

Q3: A - 2

Q4: B - $2\pi r\ (h+r)$

Q5: C - $\pi r^2 h$

Q6: D - Cubic units

Q7: A - Square units

Q8: B - 4242.86 cm^2

Q9: C - 339.43 cm^3

Q10: A - 31.43 cm