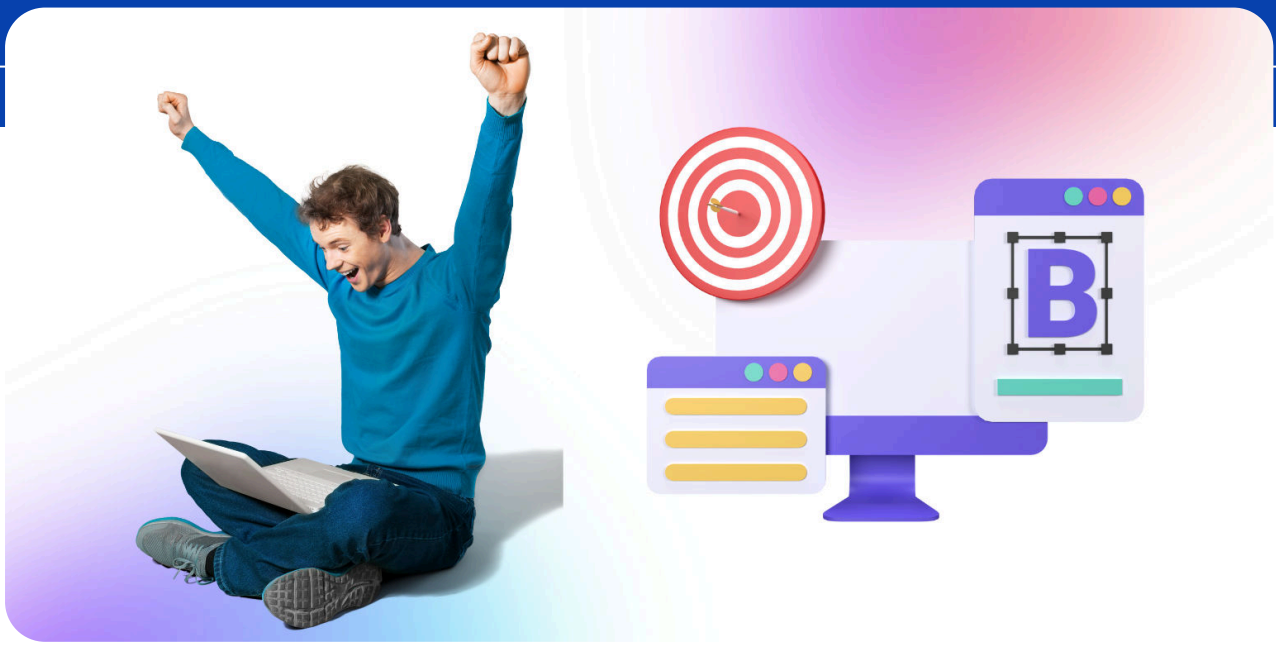
Edulyte

VOLUME FORMULAS

Understanding the concept of volume in geometry is pivotal. Volume represents the amount of space an object occupies. Knowing a shape's volume formula is essential for comprehending both 2D and 3D shapes.

Read more



Q1: What is the formula for the volume of a cube?

A: $V = r^2h$
B: $V = 4/3\pi r^3$
C: $V = s^3$
D: $V = lwh$

Q2: Which shape has zero volume?

A: Sphere
B: Line segment
C: Cone
D: Cube

Q3: What is the volume of a rectangular prism with length 5 cm, width 3 cm, and height 2 cm?

A: 30 cm^3
B: 15 cm^3
C: 10 cm^3
D: 6 cm^3

Q4: What is the formula for the volume of a cylinder?

A: $V = \pi r^2h$
B: $V = lwh$
C: $V = bh$
D: $V = s^3$

Q5: Which geometric shape is associated with the formula $V = 1/3\pi r^2h$?

A: Sphere
B: Cone
C: Cylinder
D: Cube

Q6: In the formula V = lwh, what does each variable represent?

A: length, Width, height
B: Radius, Height
C: Side length
D: Base, height

Q7: What is the volume formula for a pyramid with base area A, and height h?

A: V = Ah
B: V = 1/3Ah
C: V = A/h
D: V = A + h

Q8: For a sphere, what are the relationship between the radius (r) and the volume (V)?

A: $V = \pi r^2$
B: $V = 4/3\pi r^3$
C: $V = 1/3\pi r^2 h$
D: V = lwh

Q9: What is the volume formula for a triangular prism with base area A, and height h?

A: V = Ah
B: V = 1/2Ah
C: V = A/h
D: V = A + h

Q10: In the formula $V = s^3$, what does 's' represent?

A: Surface area
B: Slant height
C: Side length
D: Sum of dimensions

Answers

Q1: C - $V = s^3$

Q2: B - Line segment

Q3: B - 15 cm^3

Q4: A - $V = \pi r^2 h$

Q5: B - Cone

Q6: A - length, Width, height

Q7: B - V = 1/3Ah

Q8: B - $V = 4/3\pi r^3$

Q9: B - V = 1/2Ah

Q10: C - Side length