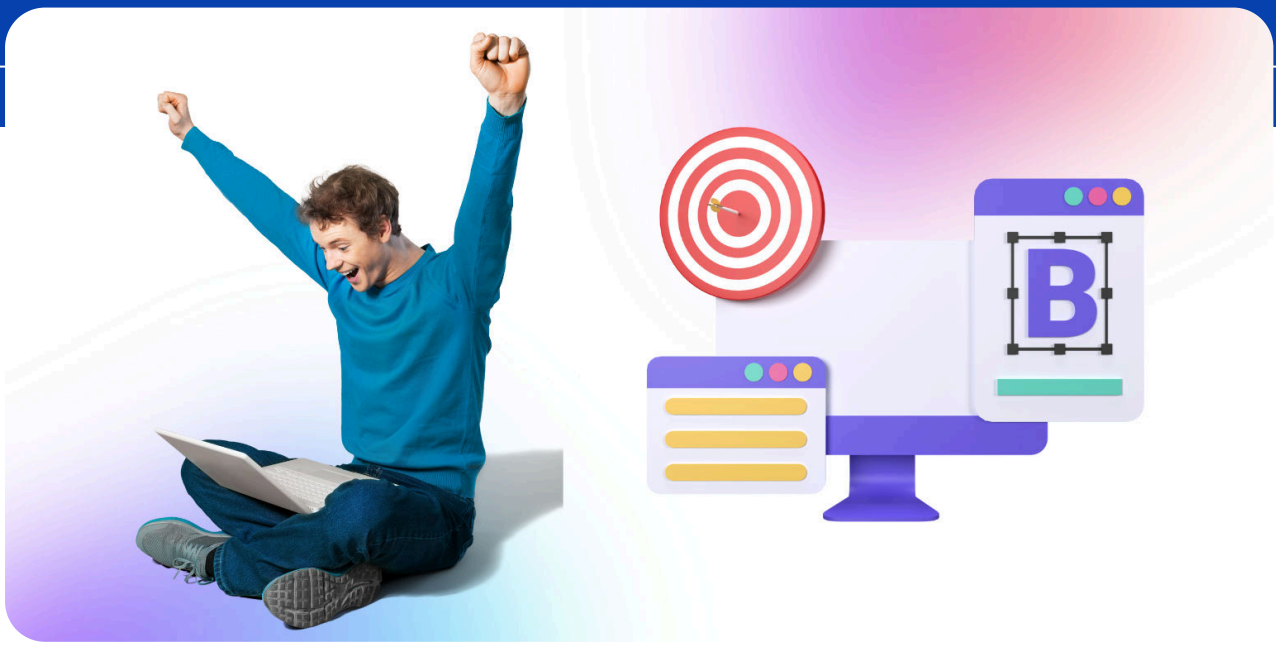
Edulyte

VOLUME OF SPHERE FORMULA

The volume of a sphere measures the space it can occupy. It is an extremely important mathematical formula with application in real-world scenarios, such as determining the size of sports equipment like football, basketball, and tennis balls or calculating the dosage of medicine in tablets.

Read more



Q1: What does 'r' represent in the sphere volume formula?

A: Diameter
B: Radius
C: Circumference
D: Area

Q2: Which statement is true about the relationship between sphere volume and surface area?

A: They are unrelated.
B: Surface area = Volume.
C: There is no relationship.
D: They complement each other.

Q3: What's the unit of volume of the sphere?

A: Units2
B: Units
C: Units3
D: Units4

Q4: What is the relation between the diameter and radius of a sphere?

A: 2r=d
B: 2d=r
C: 2r=2d
D: 4r=16d

Q5: What is the relation between the volume and radius of the sphere?

A: They are directly proportional to each other.
B: They are indirectly proportional to each other.
C: They are not related at all.
D: None of the above.

Q6: How do you derive the sphere volume formula?

A: By Integration
B: By Differentiation
C: By Division
D: Multiplication

Q7: What is the volume of a sphere with a radius of 4 cm?

A: 343 cm3
B: 789 cm3
C: 268.19 cm3
D: 214.58 cm3

Q8: What is the diameter of a sphere of volume 523.75 cm3?

A: 5 cm
B: 15 cm
C: 10 cm
D: 9 cm

Q9: Where is the sphere volume formula applied in the real world?

A: Planetary Science
B: Medicinal Science
C: Physics
D: All of the above

Q10: Direct proportionality exists between the volume of a sphere and

A: The cube of the radius.
B: The cube of the diameter.
C: Both a and b
D: None of the above.

Answers

Q1: B - Radius

Q2: D - They complement each other.

Q3: C - Units3

Q4: A - 2r=d

Q5: A - They are directly proportional to each other.

Q6: A - By Integration

Q7: C - 268.19 cm3

Q8: C - 10 cm

Q9: D - All of the above

Q10: C - Both a and b