REVISION GUIDE

Surface Area and Volume Revision Sheet

A stronger revision sheet for cylinders, cones, and spheres that keeps radius, diameter, slant height, and result units clear.

QUICK OVERVIEW

Category: geometry trigonometry

Includes 1 related guide page.

Links back to 6 calculator tools.

FORMULA HIGHLIGHTS

Cylinder surface area

A = 2 pi r^2 + 2 pi r h

Cone volume

V = 1/3 pi r^2 h

CHOOSE THE QUANTITY FIRST

- Volume answers capacity questions.
- Surface area answers coverage or exposed-material questions.
- Curved surface area is not always the same as total surface area.

KEY FORMULAS

- Cylinder volume: pi r^2 h
- Cylinder total surface area: 2pi r^2 + 2pi rh
- Cone volume: (1/3)pi r^2 h
- Sphere volume: (4/3)pi r^3
- Sphere surface area: 4pi r^2

WORKED EXAMPLES

Radius and diameter must not be mixed. If diameter is given, halve it before using radius-based formulas.

Cone surface-area work may require slant height rather than the vertical height used in the volume formula.

QUICK CHECKS

- Volume -> cubic units
- Surface area -> squared units
- Check whether the top and bottom are included in the surface question