

## Solutions – Volume of 3D Shapes (A)

A cylinder has radius 3 cm and height 5 cm. Find the volume in terms of  $\pi$ .

$$45\pi \text{ cm}^3$$

A pyramid has rectangular base 10 cm  $\times$  7 cm and height 4 cm. Find the volume.

$$280/3 \text{ cm}^3$$

A cone has radius 4 cm and height 5 cm. Find the volume in terms of  $\pi$ .

$$80\pi/3 \text{ cm}^3$$

A sphere has radius 8 cm. Find the volume in terms of  $\pi$ .

$$2048\pi/3 \text{ cm}^3$$

A sphere has radius 2 cm. Find the volume in terms of  $\pi$ .

$$32\pi/3 \text{ cm}^3$$

A cuboid has dimensions 2 cm  $\times$  3 cm  $\times$  1 cm. Find the volume.

$$6 \text{ cm}^3$$

## Solutions – Volume of 3D Shapes (B)

A cuboid has dimensions  $1\text{ cm} \times 6\text{ cm} \times 6\text{ cm}$ . Find the volume.

$36\text{ cm}^3$

A cylinder has radius  $10\text{ cm}$  and height  $10\text{ cm}$ . Find the volume in terms of  $\pi$ .

$1000\pi\text{ cm}^3$

A sphere has radius  $6\text{ cm}$ . Find the volume in terms of  $\pi$ .

$288\pi\text{ cm}^3$

A pyramid has rectangular base  $3\text{ cm} \times 1\text{ cm}$  and height  $5\text{ cm}$ . Find the volume.

$5\text{ cm}^3$

A cone has radius  $4\text{ cm}$  and height  $1\text{ cm}$ . Find the volume in terms of  $\pi$ .

$16\pi/3\text{ cm}^3$

A cuboid has dimensions  $10\text{ cm} \times 4\text{ cm} \times 9\text{ cm}$ . Find the volume.

$360\text{ cm}^3$

## Solutions – Volume of 3D Shapes (C)

A cylinder has radius 7 cm and height 10 cm. Find the volume in terms of  $\pi$ .

$$490\pi \text{ cm}^3$$

A cone has radius 7 cm and height 6 cm. Find the volume in terms of  $\pi$ .

$$98\pi \text{ cm}^3$$

A sphere has radius 6 cm. Find the volume in terms of  $\pi$ .

$$288\pi \text{ cm}^3$$

A cuboid has dimensions 6 cm  $\times$  1 cm  $\times$  1 cm. Find the volume.

$$6 \text{ cm}^3$$

A pyramid has rectangular base 1 cm  $\times$  7 cm and height 6 cm. Find the volume.

$$14 \text{ cm}^3$$

A cone has radius 2 cm and height 6 cm. Find the volume in terms of  $\pi$ .

$$8\pi \text{ cm}^3$$

## Solutions – Volume of 3D Shapes (D)

A sphere has radius 7 cm. Find the volume in terms of  $\pi$ .

$$1372\pi/3 \text{ cm}^3$$

A cuboid has dimensions 6 cm  $\times$  5 cm  $\times$  6 cm. Find the volume.

$$180 \text{ cm}^3$$

A pyramid has rectangular base 1 cm  $\times$  6 cm and height 3 cm. Find the volume.

$$6 \text{ cm}^3$$

A cone has radius 1 cm and height 8 cm. Find the volume in terms of  $\pi$ .

$$8\pi/3 \text{ cm}^3$$

A cylinder has radius 8 cm and height 1 cm. Find the volume in terms of  $\pi$ .

$$64\pi \text{ cm}^3$$

A pyramid has rectangular base 6 cm  $\times$  5 cm and height 2 cm. Find the volume.

$$20 \text{ cm}^3$$

## Solutions – Volume of 3D Shapes (E)

A cuboid has dimensions  $8\text{ cm} \times 3\text{ cm} \times 4\text{ cm}$ . Find the volume.

$96\text{ cm}^3$

A sphere has radius  $10\text{ cm}$ . Find the volume in terms of  $\pi$ .

$4000\pi/3\text{ cm}^3$

A cuboid has dimensions  $3\text{ cm} \times 3\text{ cm} \times 7\text{ cm}$ . Find the volume.

$63\text{ cm}^3$

A pyramid has rectangular base  $1\text{ cm} \times 2\text{ cm}$  and height  $5\text{ cm}$ . Find the volume.

$10/3\text{ cm}^3$

A cone has radius  $2\text{ cm}$  and height  $4\text{ cm}$ . Find the volume in terms of  $\pi$ .

$16\pi/3\text{ cm}^3$

A cylinder has radius  $3\text{ cm}$  and height  $4\text{ cm}$ . Find the volume in terms of  $\pi$ .

$36\pi\text{ cm}^3$

## Solutions – Volume of 3D Shapes (F)

A cuboid has dimensions  $8\text{ cm} \times 10\text{ cm} \times 9\text{ cm}$ . Find the volume.

$720\text{ cm}^3$

A cylinder has radius  $8\text{ cm}$  and height  $10\text{ cm}$ . Find the volume in terms of  $\pi$ .

$640\pi\text{ cm}^3$

A cone has radius  $4\text{ cm}$  and height  $3\text{ cm}$ . Find the volume in terms of  $\pi$ .

$16\pi\text{ cm}^3$

A pyramid has rectangular base  $1\text{ cm} \times 9\text{ cm}$  and height  $1\text{ cm}$ . Find the volume.

$3\text{ cm}^3$

A pyramid has rectangular base  $3\text{ cm} \times 3\text{ cm}$  and height  $2\text{ cm}$ . Find the volume.

$6\text{ cm}^3$

A sphere has radius  $10\text{ cm}$ . Find the volume in terms of  $\pi$ .

$4000\pi/3\text{ cm}^3$

## Solutions – Volume of 3D Shapes (G)

A pyramid has rectangular base  $8\text{ cm} \times 8\text{ cm}$  and height  $4\text{ cm}$ . Find the volume.

$$256/3\text{ cm}^3$$

A cuboid has dimensions  $2\text{ cm} \times 6\text{ cm} \times 9\text{ cm}$ . Find the volume.

$$108\text{ cm}^3$$

A sphere has radius  $1\text{ cm}$ . Find the volume in terms of  $\pi$ .

$$4\pi/3\text{ cm}^3$$

A cylinder has radius  $8\text{ cm}$  and height  $10\text{ cm}$ . Find the volume in terms of  $\pi$ .

$$640\pi\text{ cm}^3$$

A cylinder has radius  $8\text{ cm}$  and height  $3\text{ cm}$ . Find the volume in terms of  $\pi$ .

$$192\pi\text{ cm}^3$$

A cone has radius  $10\text{ cm}$  and height  $4\text{ cm}$ . Find the volume in terms of  $\pi$ .

$$400\pi/3\text{ cm}^3$$

## Solutions – Volume of 3D Shapes (H)

A cuboid has dimensions  $2\text{ cm} \times 3\text{ cm} \times 3\text{ cm}$ . Find the volume.

$$18\text{ cm}^3$$

A sphere has radius  $9\text{ cm}$ . Find the volume in terms of  $\pi$ .

$$972\pi\text{ cm}^3$$

A cylinder has radius  $3\text{ cm}$  and height  $3\text{ cm}$ . Find the volume in terms of  $\pi$ .

$$27\pi\text{ cm}^3$$

A pyramid has rectangular base  $3\text{ cm} \times 4\text{ cm}$  and height  $9\text{ cm}$ . Find the volume.

$$36\text{ cm}^3$$

A cone has radius  $4\text{ cm}$  and height  $10\text{ cm}$ . Find the volume in terms of  $\pi$ .

$$160\pi/3\text{ cm}^3$$

A cylinder has radius  $3\text{ cm}$  and height  $1\text{ cm}$ . Find the volume in terms of  $\pi$ .

$$9\pi\text{ cm}^3$$



## Solutions – Volume of 3D Shapes (I)

A pyramid has rectangular base  $4\text{ cm} \times 1\text{ cm}$  and height  $7\text{ cm}$ . Find the volume.

$$28/3\text{ cm}^3$$

A cylinder has radius  $4\text{ cm}$  and height  $1\text{ cm}$ . Find the volume in terms of  $\pi$ .

$$16\pi\text{ cm}^3$$

A sphere has radius  $6\text{ cm}$ . Find the volume in terms of  $\pi$ .

$$288\pi\text{ cm}^3$$

A cuboid has dimensions  $10\text{ cm} \times 7\text{ cm} \times 6\text{ cm}$ . Find the volume.

$$420\text{ cm}^3$$

A pyramid has rectangular base  $6\text{ cm} \times 5\text{ cm}$  and height  $1\text{ cm}$ . Find the volume.

$$10\text{ cm}^3$$

A cone has radius  $3\text{ cm}$  and height  $7\text{ cm}$ . Find the volume in terms of  $\pi$ .

$$21\pi\text{ cm}^3$$

## Solutions – Volume of 3D Shapes (J)

A cuboid has dimensions  $2\text{ cm} \times 10\text{ cm} \times 9\text{ cm}$ . Find the volume.

$180\text{ cm}^3$

A cylinder has radius  $10\text{ cm}$  and height  $6\text{ cm}$ . Find the volume in terms of  $\pi$ .

$600\pi\text{ cm}^3$

A pyramid has rectangular base  $1\text{ cm} \times 4\text{ cm}$  and height  $8\text{ cm}$ . Find the volume.

$32/3\text{ cm}^3$

A pyramid has rectangular base  $2\text{ cm} \times 8\text{ cm}$  and height  $4\text{ cm}$ . Find the volume.

$64/3\text{ cm}^3$

A sphere has radius  $9\text{ cm}$ . Find the volume in terms of  $\pi$ .

$972\pi\text{ cm}^3$

A cone has radius  $8\text{ cm}$  and height  $3\text{ cm}$ . Find the volume in terms of  $\pi$ .

$64\pi\text{ cm}^3$