

## 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  $10 \text{ cm} \times 7 \text{ cm}$  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  $2 \text{ cm} \times 3 \text{ cm} \times 1 \text{ cm}$ . 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 cm}<sup>3</sup>**

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

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

A sphere has radius 6 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 cm. Find the volume.

**5 cm}<sup>3</sup>**

A cone has radius 4 cm and height 1 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 cm}<sup>3</sup>**

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

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

**490 $\pi$  cm<sup>3</sup>**

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

**98 $\pi$  cm<sup>3</sup>**

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

**288 $\pi$  cm<sup>3</sup>**

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

**6 cm<sup>3</sup>**

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

**14 cm<sup>3</sup>**

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

**8 $\pi$  cm<sup>3</sup>**

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

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

**1372 $\pi$ /3 cm<sup>3</sup>**

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

**180 cm<sup>3</sup>**

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

**6 cm<sup>3</sup>**

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

**8 $\pi$ /3 cm<sup>3</sup>**

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

**64 $\pi$  cm<sup>3</sup>**

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

**20 cm<sup>3</sup>**

## 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 cm}^3**

A sphere has radius 10 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 cm}^3**

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

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

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

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

A cylinder has radius 3 cm and height 4 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 cm<sup>3</sup>**

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

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

A cone has radius 4 cm and height 3 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 cm. Find the volume.

**3 cm<sup>3</sup>**

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

**6 cm<sup>3</sup>**

A sphere has radius 10 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 cm. Find the volume.

**256/3 cm<sup>3</sup>**

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

**108 cm<sup>3</sup>**

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

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

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

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

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

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

A cone has radius 10 cm and height 4 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 cm}<sup>3</sup>**

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

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

A cylinder has radius 3 cm and height 3 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 cm. Find the volume.

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

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

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

A cylinder has radius 3 cm and height 1 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 cm. Find the volume.

**28/3 cm<sup>3</sup>**

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

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

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

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

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

**420 cm<sup>3</sup>**

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

**10 cm<sup>3</sup>**

A cone has radius 3 cm and height 7 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 cm<sup>3</sup>**

A cylinder has radius 10 cm and height 6 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 cm. Find the volume.

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

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

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

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

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

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

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