

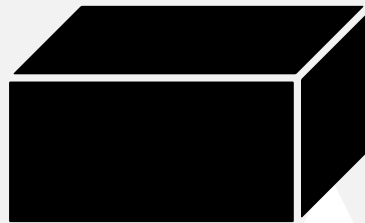
47. How to use formulas to calculate the volume of 3D shapes



Practice Questions: Round answers to the nearest whole number, use $\pi = 3.14$

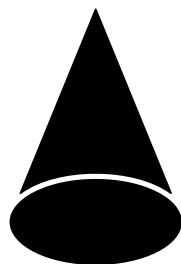
1. Find the volume of a rectangular prism with length = 6 cm, width = 4 cm, and height = 5 cm.

(Volume formula: $V = \text{length} \times \text{width} \times \text{height}$)



2. What is the volume of a cone with radius = 3 cm and height = 7 cm?

(Volume formula: $V = \frac{1}{3} \times \pi \times \text{radius}^2 \times \text{height}$)



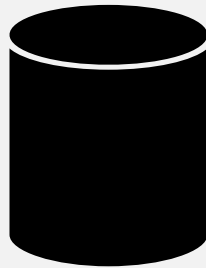
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Practice Questions: Round answers to the nearest whole number, use $\pi = 3.14$

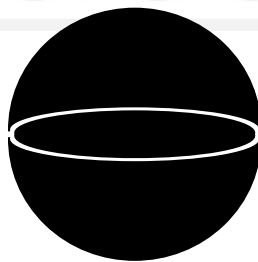
3. Calculate the volume of a cylinder with radius = 2.5 m and height = 10 m.

(Volume formula: $V = \pi \times \text{radius}^2 \times \text{height}$)

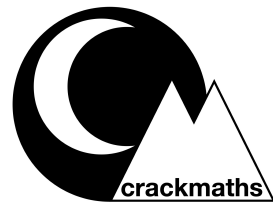


4. Determine the volume of a sphere with radius = 8 cm.

(Volume formula: $V = \frac{4}{3} \times \pi \times \text{radius}^3$)



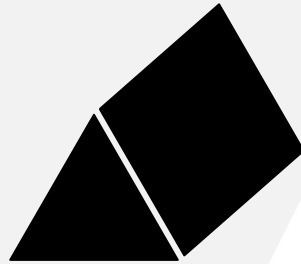
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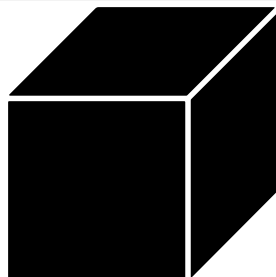
5. Find the volume of a triangular prism with triangle area = 10 cm^2 and height = 12 cm .

(Volume formula: $V = \text{triangle area} \times \text{height}$)

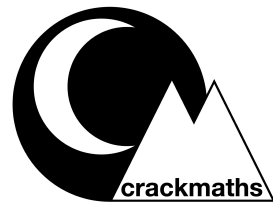


6. Calculate the volume of a cube with side length = 9 cm .

(Volume formula: $V = \text{side length}^3$)



47. How to use formulas to calculate the volume of 3D shapes



Practice Questions: Round answers to the nearest whole number, use $\pi = 3.14$

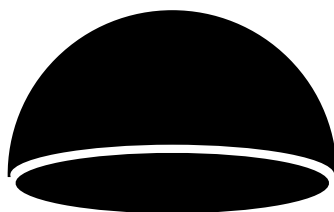
7. Determine the volume of a pyramid with base area = 15 m^2 and height = 6 m .

(Volume formula: $V = \frac{1}{3} \times \text{base area} \times \text{height}$)



8. Find the volume of a hemisphere with radius = 5 mm .

(Volume formula: $V = \frac{2}{3} \times \pi \times \text{radius}^3$)



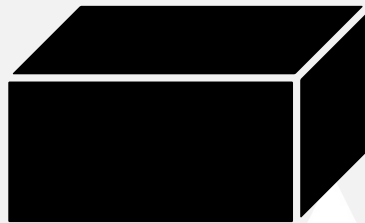
47. How to use formulas to calculate the volume of 3D shapes



Practice Questions: Round answers to the nearest whole number, use $\pi = 3.14$

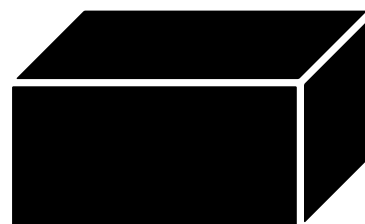
9. Find the length of a cuboid with
Volume = 100 cm^3 , width = 4 cm, and height = 5
cm.

(Volume formula: $V = \text{length} \times \text{width} \times \text{height}$)



10. Find the Width of a cuboid with
Volume = 300 cm^3 , length = 15 cm, and height =
10 cm.

(Volume formula: $V = \text{length} \times \text{width} \times \text{height}$)



47. How to use formulas to calculate the volume of 3D shapes



Practice Questions: **Answers**

1. Find the volume of a rectangular prism with length = 6 cm, width = 4 cm, and height = 5 cm.

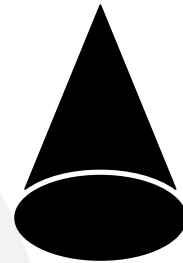
(Volume formula: $V = \text{length} \times \text{width} \times \text{height}$)



1. The volume of the rectangular prism is 120 cubic centimeters (cm^3).

2. What is the volume of a cone with radius = 3 cm and height = 7 cm?

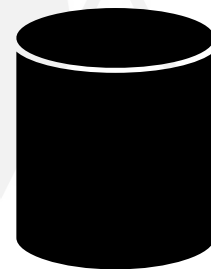
(Volume formula: $V = \frac{1}{3} \times \pi \times \text{radius}^2 \times \text{height}$)



2. The volume of the cone is approximately 66 cubic centimeters (cm^3).

3. Calculate the volume of a cylinder with radius = 2.5 m and height = 10 m.

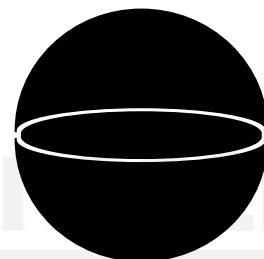
(Volume formula: $V = \pi \times \text{radius}^2 \times \text{height}$)



3. The volume of the cylinder is approximately 196 cubic meters (m^3).

4. Determine the volume of a sphere with radius = 8 cm.

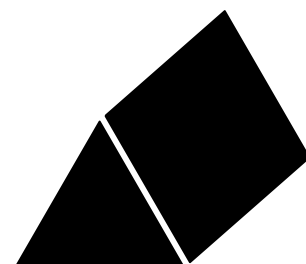
(Volume formula: $V = \frac{4}{3} \times \pi \times \text{radius}^3$)



4. The volume of the sphere is approximately 2144 cubic centimeters (cm^3).

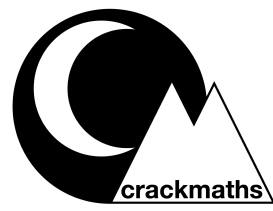
5. Find the volume of a triangular prism with triangle area = 10 cm^2 and height = 12 cm.

(Volume formula: $V = \text{triangle area} \times \text{height}$)



5. The volume of the triangular prism is 120 cubic centimeters (cm^3).

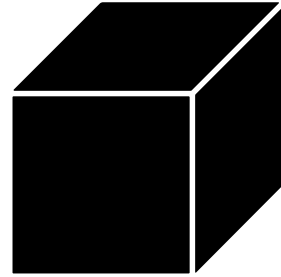
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Practice Questions: **Answers**

6. Calculate the volume of a cube with side length = 9 cm.

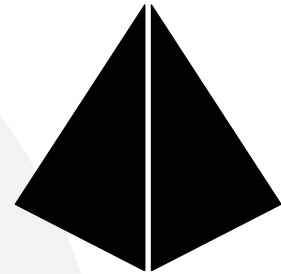
(Volume formula: $V = \text{side length}^3$)



6. The volume of the cube is 729 cubic centimeters (cm^3).

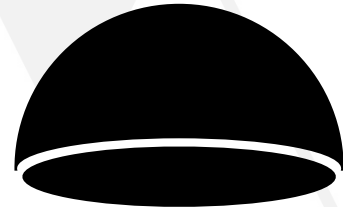
7. Determine the volume of a pyramid with base area = 15 m^2 and height = 6 m.

(Volume formula: $V = \frac{1}{3} \times \text{base area} \times \text{height}$)



7. The volume of the pyramid is 30 cubic meters (m^3).

8. Find the volume of a hemisphere with radius = 5 mm. (Volume formula: $V = \frac{2}{3} \times \pi \times \text{radius}^3$)



8. The volume of the hemisphere is approximately 262 cubic millimeters (mm^3).

9. Find the length of a cuboid with Volume = 100 cm^3 , width = 4 cm, and height = 5 cm.

(Volume formula: $V = \text{length} \times \text{width} \times \text{height}$)



9. The Length of the rectangular prism is 5 centimeters (cm).

10. Find the Width of a cuboid with Volume = 300 cm^3 , length = 15 cm, and height = 10 cm.

(Volume formula: $V = \text{length} \times \text{width} \times \text{height}$)



10. The width of the cuboid is 2 centimeters (cm).