

Geometry & Measurement: Volume of Rectangular Prisms



Use the matching sheet ID when checking answers.

Find the volume of each 3D rectangular box shown below. Choose the correct cubic measurement.

1. Calculate the volume of the rectangular storage prism shown below with length = 6 ft, width = 3 ft, and height = 2 ft.

Answer: B. 36 cubic feet (ft^3)

Volume = length $\times$ width $\times$ height = $6 \text{ ft} \times 3 \text{ ft} \times 2 \text{ ft} = 36 \text{ cubic feet } (\text{ft}^3)$.

3. Calculate the volume of the rectangular block shown below with length = 8 in, width = 6 in, and height = 3 in.

Answer: C. 144 cubic inches (in^3)

Volume = length $\times$ width $\times$ height = $8 \text{ in} \times 6 \text{ in} \times 3 \text{ in} = 144 \text{ cubic inches } (\text{in}^3)$.

2. Calculate the volume of the rectangular container shown below with length = 9 cm, width = 5 cm, and height = 4 cm.

Answer: A. 180 cubic centimeters (cm^3)

Volume = length $\times$ width $\times$ height = $9 \text{ cm} \times 5 \text{ cm} \times 4 \text{ cm} = 180 \text{ cubic centimeters } (\text{cm}^3)$.