



Volume of Rectangular Prisms

Name: _____

Date: _____

Grade: Grade 5

Part A: Fill in the Blank

Write the missing word or number on each line.

1. To find the volume of an L-shaped solid, split it into two _____ and add their volumes.
2. Prism A is $4 \times 3 \times 2$ cm and Prism B is $5 \times 3 \times 2$ cm. The combined volume is _____ cm^3 .
3. A block is $10 \times 6 \times 4$ cm with a $3 \times 2 \times 4$ cm notch cut out. The remaining volume is _____ cm^3 .
4. Two identical prisms each $2 \times 3 \times 5$ in are stacked. The total volume is _____ in^3 .
5. A T-shaped solid has a top piece $8 \times 2 \times 3$ cm and a base $4 \times 2 \times 5$ cm. Total volume is _____ cm^3 .
6. When a hole is cut from a solid, we _____ the hole's volume from the solid's volume.
7. A $6 \times 6 \times 6$ cm cube has a $2 \times 2 \times 6$ cm tunnel cut through it. The remaining volume is _____ cm^3 .
8. Prism A is $3 \times 4 \times 5$ m and Prism B is $3 \times 4 \times 3$ m. Together their volume is _____ m^3 .
9. A step shape has a bottom layer $10 \times 4 \times 2$ cm and a top layer $6 \times 4 \times 2$ cm. Its volume is _____ cm^3 .

Part B: Matching

Match each item on the left to the correct answer on the right.

1. Match each item to its correct answer.

Bottom $8 \times 5 \times 3$ + Top $4 \times 5 \times 2$	→ _____	84 cm^3
Solid $7 \times 4 \times 6$ – Hole $2 \times 2 \times 6$	→ _____	90 cm^3
Two stacked: $3 \times 3 \times 4$ and $3 \times 3 \times 6$	→ _____	144 cm^3
Bottom $6 \times 4 \times 2$ + Top $3 \times 4 \times 3$	→ _____	160 cm^3

Answer Key · Volume of Rectangular Prisms · Grade: Grade 5

Part A: Fill in the Blank

Write the missing word or number on each line.

- To find the volume of an L-shaped solid, split it into two **rectangular prisms** and add their volumes.
- Prism A is $4 \times 3 \times 2$ cm and Prism B is $5 \times 3 \times 2$ cm. The combined volume is **54** cm^3 .
- A block is $10 \times 6 \times 4$ cm with a $3 \times 2 \times 4$ cm notch cut out. The remaining volume is **216** cm^3 .
- Two identical prisms each $2 \times 3 \times 5$ in are stacked. The total volume is **60** in^3 .
- A T-shaped solid has a top piece $8 \times 2 \times 3$ cm and a base $4 \times 2 \times 5$ cm. Total volume is **88** cm^3 .
- When a hole is cut from a solid, we **subtract** the hole's volume from the solid's volume.
- A $6 \times 6 \times 6$ cm cube has a $2 \times 2 \times 6$ cm tunnel cut through it. The remaining volume is **192** cm^3 .
- Prism A is $3 \times 4 \times 5$ m and Prism B is $3 \times 4 \times 3$ m. Together their volume is **96** m^3 .
- A step shape has a bottom layer $10 \times 4 \times 2$ cm and a top layer $6 \times 4 \times 2$ cm. Its volume is **128** cm^3 .

Part B: Matching

Match each item on the left to the correct answer on the right.

- Match each item to its correct answer.

Bottom $8 \times 5 \times 3$ + Top $4 \times 5 \times 2$	→ 160 cm^3	84 cm^3
Solid $7 \times 4 \times 6$ – Hole $2 \times 2 \times 6$	→ 144 cm^3	90 cm^3
Two stacked: $3 \times 3 \times 4$ and $3 \times 3 \times 6$	→ 90 cm^3	144 cm^3
Bottom $6 \times 4 \times 2$ + Top $3 \times 4 \times 3$	→ 84 cm^3	160 cm^3