



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 figure, split it into two rectangular _____ and add their volumes.
2. A prism is $7\text{ cm} \times 4\text{ cm} \times 6\text{ cm}$. Its volume is _____ cm^3 .
3. A box has a volume of 150 m^3 . If the base area is 30 m^2 , the height is _____ m.
4. Prism A is $4 \times 5 \times 3\text{ cm}$ and Prism B is $2 \times 5 \times 3\text{ cm}$. Together they have a volume of _____ cm^3 .
5. A cube with edge length 3 ft has a volume of _____ ft^3 .
6. If Prism X has volume 200 cm^3 and Prism Y has volume 180 cm^3 , Prism X holds _____ cm^3 more.
7. A rectangular prism has a volume of 96 in^3 , a length of 8 in, and a width of 4 in. Its height is _____ in.
8. The volume of a rectangular prism can also be found by multiplying the _____ of the base by the height.
9. A prism $11\text{ cm} \times 2\text{ cm} \times 5\text{ cm}$ has a volume of _____ cm^3 .

Part B: Matching

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

1. Match each rectangular prism to its volume.

| | | |
|--|---------|-------------------|
| $9\text{ cm} \times 3\text{ cm} \times 4\text{ cm}$ | → _____ | 125 cm^3 |
| $7\text{ cm} \times 6\text{ cm} \times 2\text{ cm}$ | → _____ | 108 cm^3 |
| $5\text{ cm} \times 5\text{ cm} \times 5\text{ cm}$ | → _____ | 120 cm^3 |
| $10\text{ cm} \times 4\text{ cm} \times 3\text{ cm}$ | → _____ | 84 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 figure, split it into two rectangular prisms and add their volumes.
- A prism is $7\text{ cm} \times 4\text{ cm} \times 6\text{ cm}$. Its volume is 168 cm^3 .
- A box has a volume of 150 m^3 . If the base area is 30 m^2 , the height is 5 m.
- Prism A is $4 \times 5 \times 3\text{ cm}$ and Prism B is $2 \times 5 \times 3\text{ cm}$. Together they have a volume of 90 cm^3 .
- A cube with edge length 3 ft has a volume of 27 ft^3 .
- If Prism X has volume 200 cm^3 and Prism Y has volume 180 cm^3 , Prism X holds 20 cm^3 more.
- A rectangular prism has a volume of 96 in^3 , a length of 8 in, and a width of 4 in. Its height is 3 in.
- The volume of a rectangular prism can also be found by multiplying the area of the base by the height.
- A prism $11\text{ cm} \times 2\text{ cm} \times 5\text{ cm}$ has a volume of 110 cm^3 .

Part B: Matching

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

- Match each rectangular prism to its volume.

| | | |
|--|---------------------------------------|-------------------|
| $9\text{ cm} \times 3\text{ cm} \times 4\text{ cm}$ | → <u>108 cm^3</u> | 125 cm^3 |
| $7\text{ cm} \times 6\text{ cm} \times 2\text{ cm}$ | → <u>84 cm^3</u> | 108 cm^3 |
| $5\text{ cm} \times 5\text{ cm} \times 5\text{ cm}$ | → <u>125 cm^3</u> | 120 cm^3 |
| $10\text{ cm} \times 4\text{ cm} \times 3\text{ cm}$ | → <u>120 cm^3</u> | 84 cm^3 |