

## Volume of rectangular prisms (metric units)

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### Grade 5 Word Problems Worksheet

1. A crate is 2 m long, 2 m wide and 4 m tall. What is the volume of the crate?
2. A carton of juice is 16 cm long, 5 cm wide and 20 cm tall. What is the volume of the carton?
3. A cargo container is 5 m wide, 34 m long and 6 m tall. What is the volume of the cargo container?



4. A paper bag is 16 cm long, 5 cm wide and 20 cm tall. Inside the bag is a box that is 8 cm long, 3 cm wide and 10 cm tall. How much space is left in the bag?
5. A big locker is above a small locker. They are both 0.5 m wide and 0.6 m deep. The big locker is 1.2 m tall, and the small locker is half of the height of the big locker. What is the total volume of one big locker and one small locker?

## Answers

1.  $2 \times 2 \times 4 = 16$   
The volume of the cube is 16 cubic meters.
2.  $16 \times 5 \times 20 = 1,600$   
The volume of the carton is 1,600 cubic centimeters.
3.  $5 \times 34 \times 6 = 1,020$   
The volume of the container is 1,020 cubic meters.
4.  $16 \times 5 \times 20 - 8 \times 3 \times 10 = 1,600 - 240 = 1,360$   
The space left in the bag is 1,360 cubic centimeters.
5.  $0.5 \times 0.6 \times 1.2 + 0.5 \times 0.6 \times 1.2 \times \frac{1}{2}$   
 $= 0.36 + 0.18$   
 $= 0.54$   
The total volume of one big locker and one small locker is 0.54 cubic meters.