

Volume of rectangular prisms (customary units)

Grade 5 Word Problems Worksheet

1. A cube is a rectangular prism with the same measurement for length, width, and height. If a cube is 4 inches tall, what is its volume?
2. A desk is 1.5 feet wide and 5 feet long. It is 3 feet above the floor. What is the volume of space under the desk?
3. A drawer is 5 feet wide, 4 feet deep and 2 feet tall. What is the volume of the drawer?



4. A block that is 2 inches wide, 3 inches long, and 2 inches tall. What is the volume of a tower that is built by 3 blocks?
5. The closet is 6 feet wide, 5 feet deep and 8 feet tall. In the closet, there is a suitcase that is 2 feet wide, 3 feet long and 4 feet tall. How much room is left in the closet?

Answers

1. $4 \times 4 \times 4 = 64$
The volume of the cube is 64 cubic inches.
2. $3 \times 1.5 \times 5 = 22.5$
The volume of space under the desk is 22.5 cubic feet.
3. $5 \times 4 \times 2 = 40$
The volume of the drawer is 40 cubic feet.
4. $2 \times 3 \times 2 \times 3 = 36$
The volume of a tower built by 3 blocks is 36 cubic inches.
5. $6 \times 5 \times 8 - 2 \times 3 \times 4 = 240 - 24 = 216$
The room left in the closet is 216 cubic feet.