tutorified

5.MD.C.5 Finding the Volume of Prisms

5.MD.C.5: Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume.

Give what is asked in each item and write your answers on the space provided.

1. Find the side length of each of the following cubes.

Volume = 64 m^3

Answer:

can hold 8 in^3 of liquid

Answer:

2. Find the volume of each of the following rectangular prism.

a. $2\ cm \times 3\ cm \times 2\ cm$ _____
b. $5\ m \times 4\ m \times 8\ m$ _____
c. $3\ dm \times 5\ dm \times 4\ dm$ _____
d. $6\ cm \times 6\ cm \times 7\ cm$ _____
e. $4\ cm \times 5\ cm \times 5\ cm$ _____
f. $2\ cm \times 4\ cm \times 4\ cm$ _____

3. A cubical gas tank has a side length of 5 in. How many small cubical containers, with a side length of 1 in. each, can be filled using all the gas in the larger tank?

Answer:

4. A large iron box with dimension $7\ cm \times 8\ cm \times 9\ cm$ is melted. Using the melted iron, cubical bricks with a side length of 2 cm are formed. How many bricks are formed?

Answer:

5. Find the sum of the volumes of each of the three cubes if the side length of the first one is 3 in. and the side length of the rest two cubes is 4 in.

Answer:

©Copyright. All rights reserved to Tutorified.com

tutorified

5.MD.C.5 Finding the Volume of Prisms

Answer Key

5.MD.C.5: Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume.

Give what is asked in each item and write your answers on the space provided.

1. Find the side length of each of the following cubes.

Volume = 64 m^3

Answer: 4 m

can hold 8 in^3 of liquid

Answer: 2 in

2. Find the volume of each of the following rectangular prism.

a. 2 $cm \times 3\ cm \times 2\ cm$ 12 cm^3

b. 5 $m \times 4\ m \times 8\ m$ 160 m^3

c. 3 $dm \times 5\ dm \times 4\ dm$ 60 dm^3

d. 6 $cm \times 6\ cm \times 7\ cm$ 252 cm^3

e. 4 $cm \times 5\ cm \times 5\ cm$ 100 cm^3

f. 2 $cm \times 4\ cm \times 4\ cm$ 32 cm^3

3. A cubical gas tank has a side length of 5 in. How many small cubical containers, with a side length of 1 in. each, can be filled using all the gas in the larger tank?

Answer: 125

4. A large iron box with dimension 7 $cm \times 8\ cm \times 9\ cm$ is melted. Using the melted iron, cubical bricks with a side length of 2 cm are formed. How many bricks are formed?

Answer: 63

5. Find the sum of the volumes of each of the three cubes if the side length of the first one is 3 in. and the side length of the rest two cubes is 4 in.

Answer: 155 in^3

©Copyright. All rights reserved to Tutorified.com