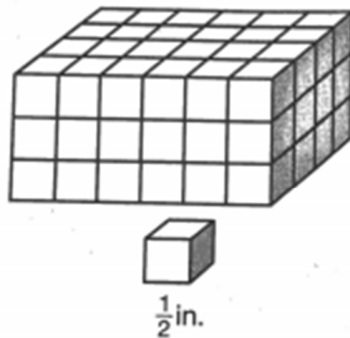


Volume of a Rectangular Prism

Homework 11

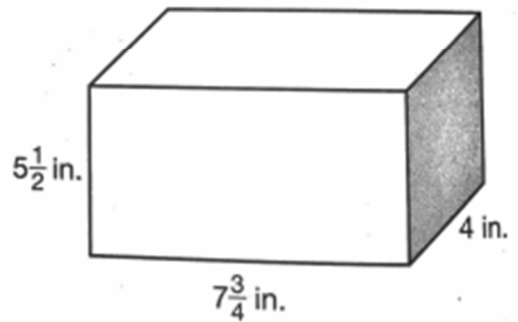
1. What is the volume of a cube that has edges of $\frac{1}{4}$ inch?
- A. $\frac{1}{64}$ in.³ C. $\frac{1}{12}$ in.³
B. $\frac{1}{16}$ in.³ D. $\frac{1}{8}$ in.³
2. What is the volume of this rectangular prism?



- A. 36 in.³ C. 12 in.³
B. 18 in.³ D. 9 in.³
3. A box shaped like a rectangular prism has a length of $8\frac{1}{4}$ inches, a width of $4\frac{3}{8}$ inches and a height of 6 inches. What is the volume of the rectangular prism?
- A. $192\frac{3}{32}$ in.³
B. $209\frac{1}{16}$ in.³
C. $216\frac{9}{16}$ in.³
D. $223\frac{11}{16}$ in.³

4. A rectangular prism has a length of $3\frac{1}{2}$ inches, a width of $2\frac{1}{2}$ inches, and a height of 3 inches. How many $\frac{1}{8}$ -inch cubes can fit inside the rectangular prism?
- A. 210
B. 420
C. 9,344
D. 13,440

5. How many times does the volume of a rectangular prism increase when all three of its dimensions are doubled?
- A. 8 C. 3
B. 6 D. 2
6. What is the volume of this rectangular prism?



- A. $141\frac{1}{2}$ in.³
B. $158\frac{1}{8}$ in.³
C. $170\frac{1}{2}$ in.³
D. $191\frac{1}{4}$ in.³

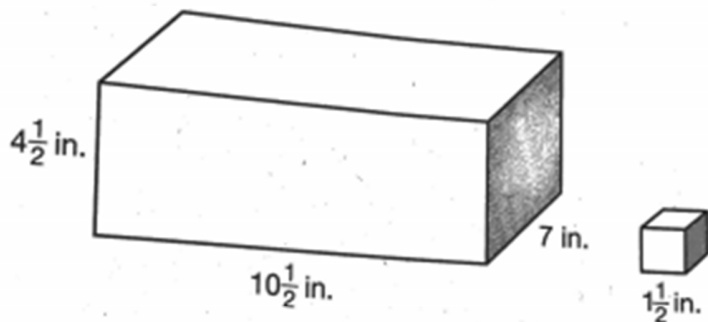
7. What is the volume of a cube that has edges of $3\frac{3}{4}$ inches?

A. $27\frac{27}{64}$ in.³
 B. $52\frac{47}{64}$ in.³
 C. $63\frac{1}{4}$ in.³
 D. $84\frac{3}{8}$ in.³

8. The floor of a rectangular swimming pool has an area of 584 square feet. The depth of the pool is a constant 4 feet 9 inches. What is the volume of the swimming pool?

A. $2,237\frac{1}{2}$ ft³
 B. $2,725\frac{1}{3}$ ft³
 C. $2,774$ ft³
 D. $2,861\frac{3}{5}$ ft³

9. A rectangular prism and a cube are shown.



- A. What is the volume of the cube?

- B. How many cubes can fit inside the rectangular prism?

- C. Explain how you found your answer to Part B.

