

Name _____

Volume of Rectangular Prisms



COMMON CORE STANDARD—6.G.2
Solve real-world and mathematical problems involving area, surface area, and volume.

Find the volume.

1. $V = lwh$
 $V = 5 \times 3\frac{1}{4} \times 9\frac{1}{4}$
 $V = 150\frac{5}{16} \text{ m}^3$

2. 2 in.
 $2\frac{1}{2} \text{ in.}$
 $5\frac{1}{2} \text{ in.}$

3. $4\frac{1}{2} \text{ mm}$
 $4\frac{1}{2} \text{ mm}$
 $4\frac{1}{2} \text{ mm}$

4. 6 ft
 $2\frac{1}{2} \text{ ft}$
 $7\frac{1}{2} \text{ ft}$

5. $4\frac{1}{2} \text{ m}$
 8 m^2

6. $2\frac{1}{4} \text{ ft}$
 6 ft
 $2\frac{1}{4} \text{ ft}$

7. 14 m
 $9\frac{1}{2} \text{ m}$
 $7\frac{1}{4} \text{ m}$

8. $\frac{1}{3} \text{ in.}$
 $\frac{1}{3} \text{ in.}$
 $\frac{1}{3} \text{ in.}$

9. $3\frac{1}{2} \text{ cm}$
 48 cm^2
 $3\frac{1}{2} \text{ cm}$

Problem Solving



10. A cereal box is a rectangular prism that is 8 inches long and $2\frac{1}{2}$ inches wide. The volume of the box is 200 in.^3 . What is the height of the box?

11. A stack of paper is $8\frac{1}{2}$ in. long by 11 in. wide by 4 in. high. What is the volume of the stack of paper?