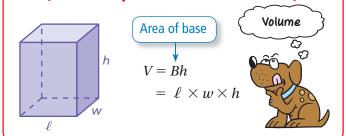
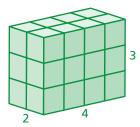
# Key Concept and Vocabulary

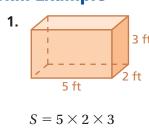


#### **Visual Model**

$$V = \ell \times w \times h$$
$$= 2 \times 4 \times 3$$
$$= 24 \text{ units}^3$$



### **Skill Example**



 $= 30 \text{ ft}^3$ 

### **Application Example**

2. An air mattress is 6 feet long, 4 feet wide, and 1 foot tall. What is the volume of the air mattress?

$$V = \ell wh$$
$$= 6 \times 4 \times 1$$
$$= 24$$

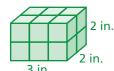
The volume is 24 cubic feet.

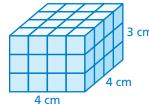
## PRACTICE MAKES PURR-FECT®

Check your answers at BigIdeasMath.com. —

Find the volume of the rectangular prism.

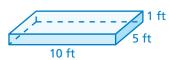


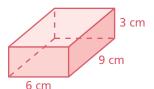


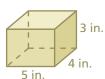


$$V = 8 \text{ ft}^3$$
  $V = 12 \text{ in.}^3$ 

$$V = 12 \text{ in.}^3$$







$$V = 50 \text{ ft}^2$$
  $V = 162 \text{ c}$ 

$$V = _{162} \text{ cm}^3$$

$$V = 60 \text{ in.}$$

- 9. **AQUARIUM** How much water is needed to fill the aquarium? 16 ft<sup>3</sup>
- **10. AQUARIUM** There are about 7.5 gallons in 1 cubic foot. How many gallons of water does the aquarium hold? about 120 gal

