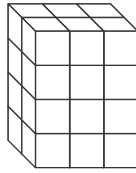


Name _____

1. Nabeel used unit cubes to make a rectangular prism. What is the volume of the prism?

1 cube = 1 cubic unit



- (A) 24 cubic units (C) 8 cubic units
(B) 12 cubic units (D) 6 cubic units

2. Select the possible dimensions for a prism with each given volume.

	6 ft, 2 ft, 5 ft	4 ft, 7 ft, 1 ft	3 ft, 5 ft, 8 ft	4 ft, 4 ft, 9 ft
28 ft ³	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
120 ft ³	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
144 ft ³	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
60 ft ³	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

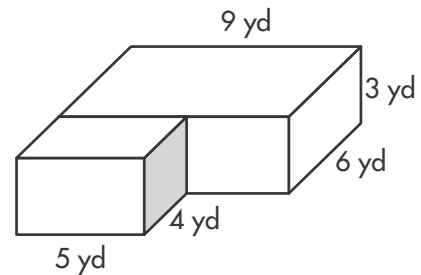
3. **A.** A storage shed is 9 feet wide, 15 feet long, and 11 feet tall. What is the volume of the shed?

- (A) 35 cubic feet
(B) 743 cubic feet
(C) 1,485 cubic feet
(D) 1,500 cubic feet

- B.** To weigh the shed down during a storm, a 1-foot layer of sand is added to the bottom of the shed. What is the volume of the sand?

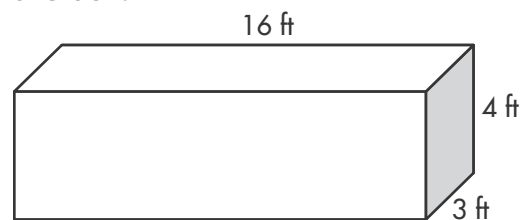
4. The living room in a new house has the dimensions shown.

- A.** Write an expression for the total volume of the room.



- B.** What is the volume of the room?

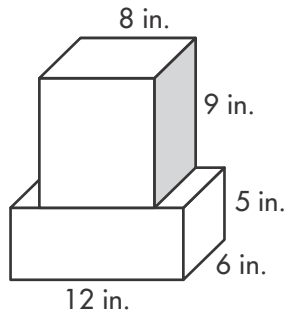
5. **A.** Choose all the expressions that could **NOT** be used to find the volume of the box.



- 7×16 $16 \times 4 \times 3$
 12×16 3×64
 $16 + 4 + 3$

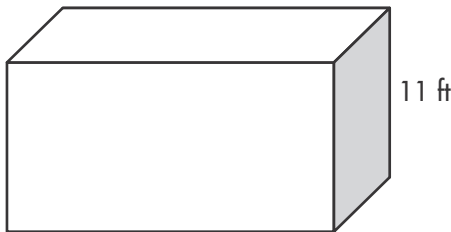
- B.** A similar box has the same dimensions except being only half as tall. What is the volume of the smaller box?

6. Kyle needs to fill the wooden platform he made to make it more stable. What is the volume of the platform?



- (A) 46 cubic inches
- (B) 92 cubic inches
- (C) 529 cubic inches
- (D) 792 cubic inches

7. A. What is the volume of the room shown?



Area of base: 96 ft²

- B. Which equation was used to find the volume of the room?

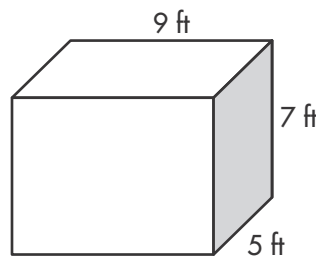
- (A) $V = \ell \times w$
- (B) $V = b \times h$
- (C) $V = \ell \times w \times h$
- (D) $V = b \times b \times h$

8. A brick wall will be shaped like a rectangular prism. The wall needs to be 3 feet tall, and the builders have enough bricks for the wall to have a volume of 330 cubic feet.

What does the area of the base of the wall need to be for the given volume and height? Give one pair of possible whole-number dimensions for the base.

9. One cereal box has a volume of 462 cubic inches. Another cereal box measures 12 inches tall, 8 inches long, and 3 inches wide. What is the combined volume of the two cereal boxes?

10. Select all the expressions that can be used to find the volume of the box in cubic feet.



- | | |
|--------------------------------------------------|---------------------------------------------|
| <input type="checkbox"/> 35×9 | <input type="checkbox"/> $(5 \times 7) + 9$ |
| <input type="checkbox"/> 12×9 | <input type="checkbox"/> 45×7 |
| <input type="checkbox"/> $(9 \times 7) \times 5$ | |