Assessment : Section B Checkpoint

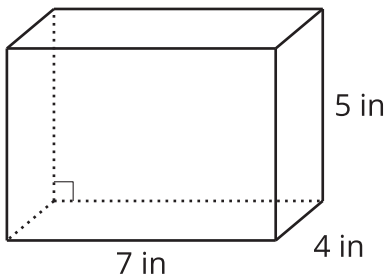
Problem 1

Goals Assessed

- Find volume using length × width × height or area of the base × height.

Statement

Find the volume of the rectangular prism. Explain or show your reasoning.



Solution

140 cubic inches. The base is 7×4 or 28 square inches and I multiplied that by the height, $28 \times 5 = 140$.

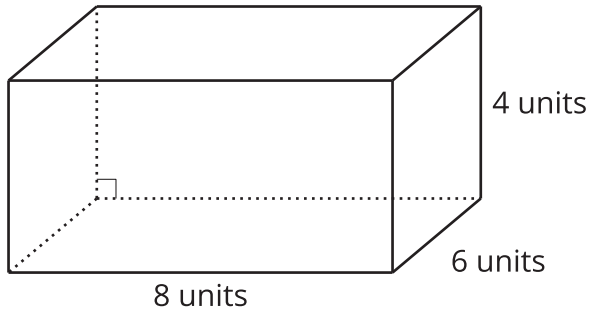
Problem 2

Goals Assessed

- Describe the calculations from the previous section as length × width × height or area of the base × height.
- Find volume using length × width × height or area of the base × height.

Statement

Explain or show how the expression 4×48 represents the volume of the rectangular prism in cubic units.



Solution

The base that the prism sits on has an area of 48 square units. There are 4 layers of 48 unit cubes in the prism so its volume is 4×48 cubic units.

Problem 3

Goals Assessed

- Find volume using length $\times$ width $\times$ height or area of the base $\times$ height.

Statement

A box is shaped like a rectangular prism. Its measurements are 6 cm by 2 cm by 15 cm. Select **all** expressions that represent the volume of the box in cubic centimeters.

A. $6 \times 2 \times 15$

B. 2×90

C. 12×30

D. 8×15

E. 15×12

Solution

["A", "B", "E"]