





is the amount ofthat a three-dimensional figure or			
	The Volume of of the	a prism is the times the 	



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## Unit 1, Lesson 15 **Practice Problems**

- 1. Jada drew a net for a polyhedron and calculated its surface area.
  - a. What polyhedron can be assembled from this net?
  - b. Jada made some mistakes in her area calculation. What were the mistakes?



- c. Find the surface area of the polyhedron. Show your reasoning.
- 2. A cereal box is 8 inches by 2 inches by 12 inches. What is its surface area? Show your reasoning. If you get stuck, consider drawing a sketch of the box or its net and labeling the edges with their measurements.
- 3. Twelve cubes are stacked to make this figure.



- a. What is its surface area?
- b. How would the surface area change if the top two cubes are removed?

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4. Here are two polyhedra and their nets. Label all edges in the net with the correct lengths.



5. a. What three-dimensional figure can be assembled from the net?



b. What is the surface area of the figure? (One grid square is 1 square unit.)





- a. Find the volume of the figure in cubic units.
- b. Find the surface area of the figure in square units.
- c. True or false: If we double the number of cubes being stacked, both the volume and surface area will double. Explain or show how you know.
- 3. Lin said, "Two figures with the same volume also have the same surface area."

## Unit 1, Lesson 16 Practice Problems

- 1. Match each quantity with an appropriate unit of measurement.
  - A. The surface area of a tissue box
  - B. The amount of soil in a planter box
  - C. The area of a parking lot
  - D. The length of a soccer field
  - E. The volume of a fish tank

- 1. Square meters
- 2. Yards

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- 3. Cubic inches
- 4. Cubic feet
- 5. Square centimeters

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4. Draw a pentagon (five-sided polygon) that has an area of 32 square units. Label all relevant sides or segments with their measurements, and show that the area is 32 square units.

- 5. a. Draw a net for this rectangular prism.
  - b. Find the surface area of the rectangular prism.

