

1



3
is the amount of $\qquad$ that a
three-dimensional figure $\qquad$ or $\qquad$ .


The Volume of a prism is the $\qquad$ of the $\qquad$ times the
$\qquad$ .


## Unit 1, Lesson 15 <br> 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?
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.)

## Unit 1, Lesson 16 Practice Problems

1. Match each quantity with an appropriate unit of measurement.
A. The surface area of a tissue box
2. Square meters
B. The amount of soil in a planter box
3. Yards
C. The area of a parking lot
4. Cubic inches
D. The length of a soccer field
5. Cubic feet
E. The volume of a fish tank
6. Square centimeters
7. Here is a figure built from snap cubes.

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.
8. Lin said, "Two figures with the same volume also have the same surface area."
a. Which two figures suggest that her statement is true?
b. Which two figures could show that her statement is not true?

A

B


E

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.


