

Name: _____

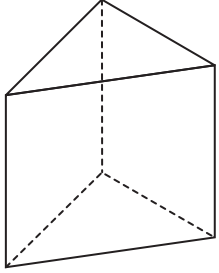
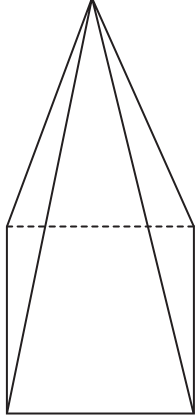
Date: _____

Cumulative Review

for Chapters 14 and 15

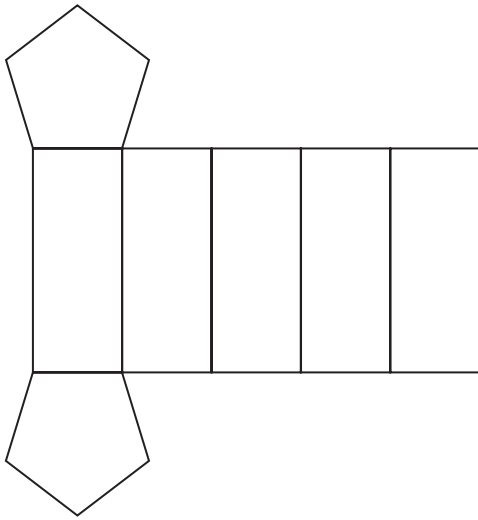
Concepts and Skills

Name each solid. Then write the number of faces and vertices, and the shapes of the faces. (Lesson 14.1)

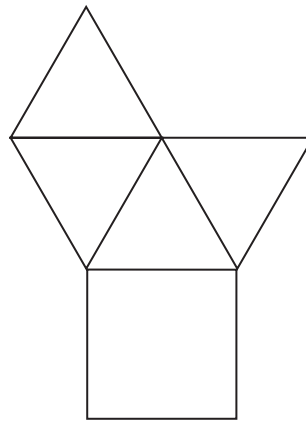
Solid	Number of Faces	Number of Vertices	Shapes of Faces
1. 			
2. 			

Name the solid formed from each net. (Lesson 14.1)

3.



4.



Complete. (Lesson 14.2)

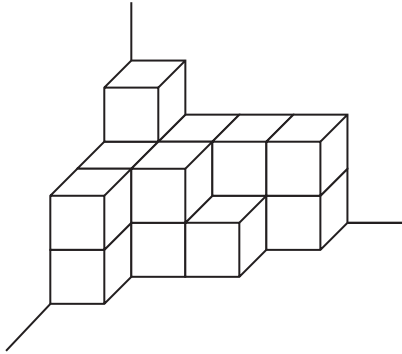
5. A _____ has two parallel and congruent bases that are joined by a curved surface.
6. A _____ does not have any edges or vertices, and has the same distance across any line through its center.
7. A _____ has one vertex, a circular base, and a curved surface.
8. A sphere has no _____ surfaces.

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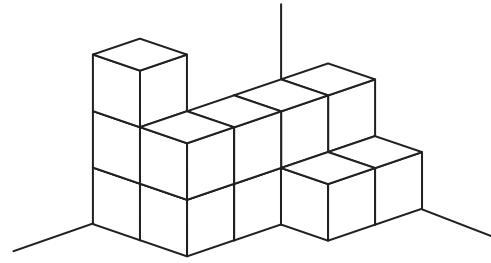
Find how many unit cubes are used to build each solid. (Lesson 15.1)

9.



_____ unit cubes

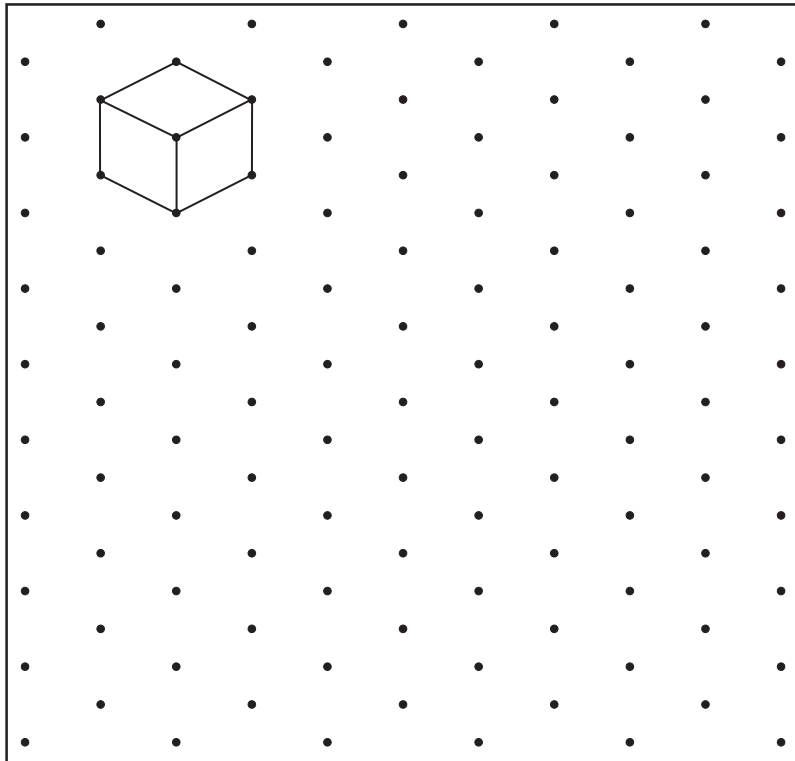
10.



_____ unit cubes

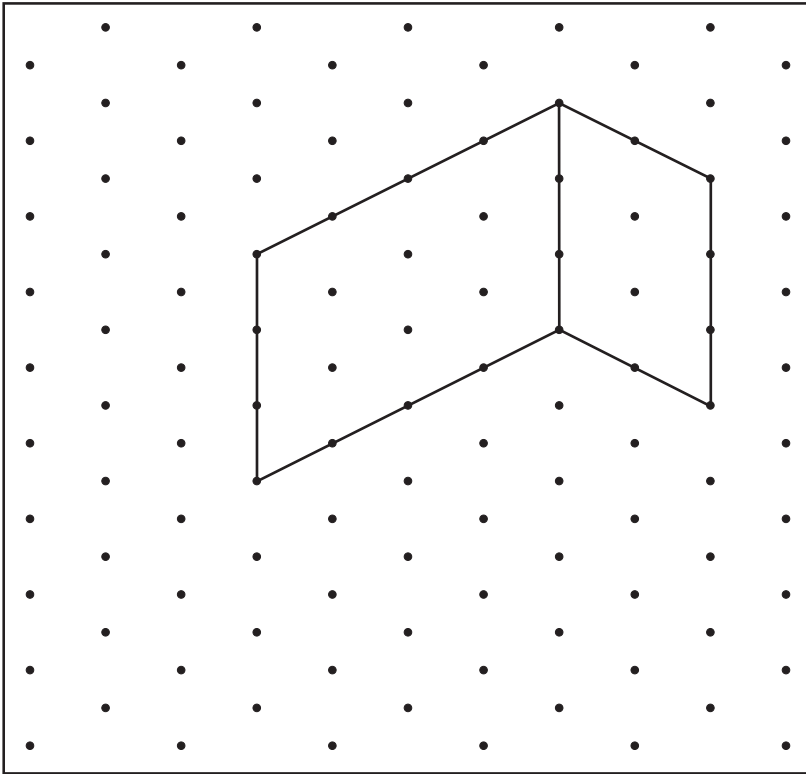
Draw a cube with edges 2 times as long as the edges of this unit cube. (Lesson 15.2)

11.



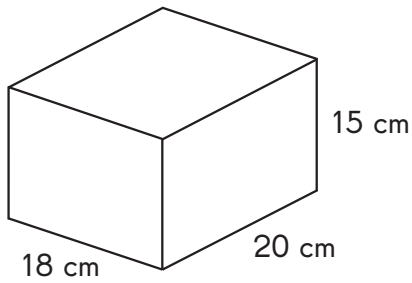
Complete the drawing of this rectangular prism. (Lesson 15.2)

12.

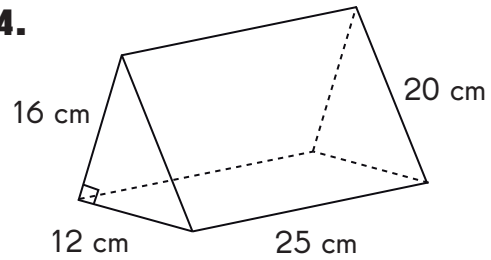


Find the surface area of each prism. (Lesson 15.3)

13.



14.



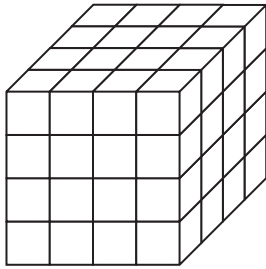
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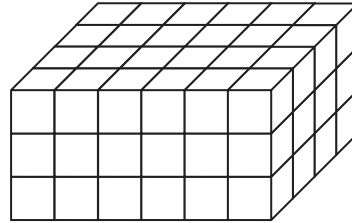
These solids are built using 1-inch cubes. Find and compare their volumes.

(Lesson 15.4)

15.



A



B

Length = _____ in.

Length = _____ in.

Width = _____ in.

Width = _____ in.

Height = _____ in.

Height = _____ in.

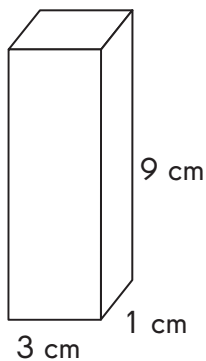
Volume = _____ in.³

Volume = _____ in.³

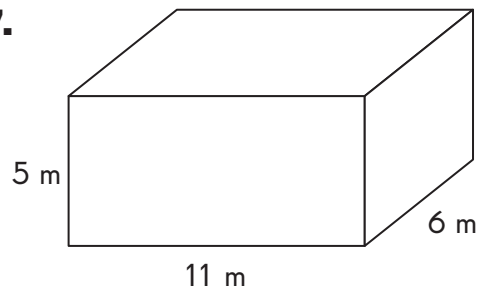
Solid _____ has lesser volume than solid _____.

Find the volume of each rectangular prism. (Lesson 15.5)

16.



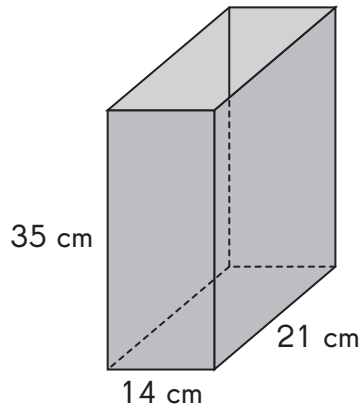
17.



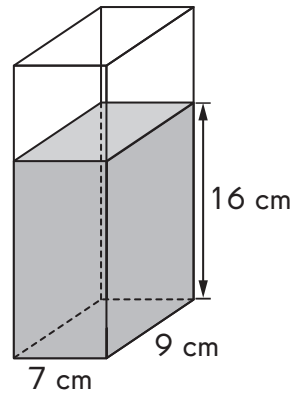
Find the volume of water in each container in liters and milliliters.

(Lesson 15.5)

18.



19.



Problem Solving

Solve. Show your work.

- 20.** The length of a rectangular block is 20 inches. Its width is half its length. Its height is half its width. What is the surface area of the block?

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Solve. Show your work.

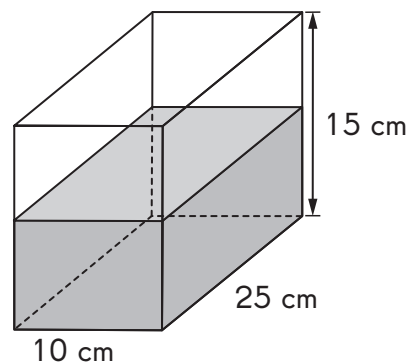
21. A rectangular piece of poster board measures 70 centimeters by 50 centimeters. The net of a cube with 12-centimeter edges is cut from it. What is the area of the poster board left?

22. A rectangular prism is 15 inches long and 12 inches high. Its width is $\frac{3}{5}$ its length. Find its volume.

Solve. Show your work.

- 23.** Three cubes with edges measuring 5 inches are stacked on top of one another. What is the total volume of the 3 cubes?

- 24.** The rectangular container shown contains 2 liters of water. How much more water must be added to fill the container completely? Give your answer in liters.



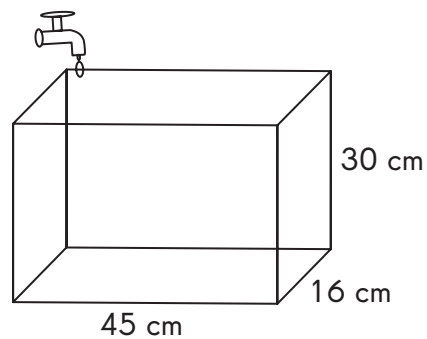
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Solve. Show your work.

- 25.** A container is 28 centimeters long, 14 centimeters wide, and 10 centimeters high. It is half-filled with juice. Kathy pours 500 milliliters of water into the container to make a juice drink. Find the volume of juice drink in the container now. Give your answer in liters and milliliters.

- 26.** The fish tank shown is filled with 4 liters of water per minute from a faucet. How long does it take to fill the tank completely?



Solve. Show your work.

- 27.** A tank with a square base with edges measuring 20 centimeters and a height of 36 centimeters is $\frac{2}{3}$ -filled with water. Each minute, 2 liters of water leak out of the tank through a crack in the bottom. How long does it take for all the water to leak out?

