

20 Three-Dimensional Figures

C.1.1.2

Example

Lori is about to open a present. Which solid describes the shape of the present?



- A cone
- B cube
- C cylinder
- D rectangular prism

Thinking It Through

If you are not sure of which shape, use the process of elimination to determine the correct answer.

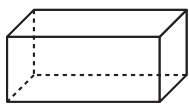
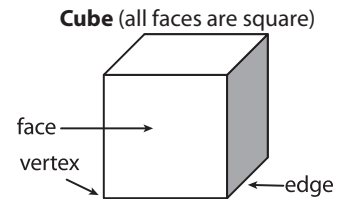
Ask Which of the shapes are made from only flat faces?
rectangular prism and cube

Now use what you know. A cube has all square faces. *Does the present look like a cube?* No.

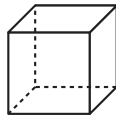
The present is made of rectangular faces, which makes it a *rectangular prism, choice D.*

Review

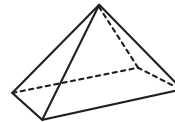
- **Three-dimensional figures** have length, width, and depth (or height). They are also called *solid* figures.
- A **face** is a flat side of a solid figure. An **edge** is a line segment where two faces of a solid figure meet. A **vertex** of a solid figure is a common point where 3 or more edges meet. An example of a face, edge, and vertex is shown in the **cube** at right.



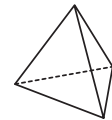
Rectangular Prism
6 faces, 12 edges,
8 vertices



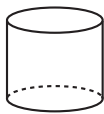
Cube
6 square faces,
12 edges, 8 vertices



Rectangular Pyramid
5 faces, 8 edges,
5 vertices



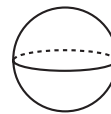
Triangular Pyramid
4 faces, 6 edges,
4 vertices



Cylinder
2 circular bases



Cone
1 circular base,
1 vertex



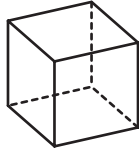
Sphere
All points an equal
distance from the center.

Three-Dimensional Figures

20

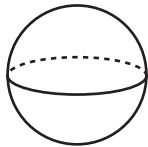
DIRECTIONS Read and solve each question. Fill in the bubble of the best answer.

- 1** What is the name of the three-dimensional figure below?



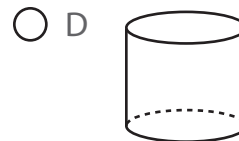
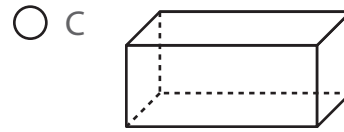
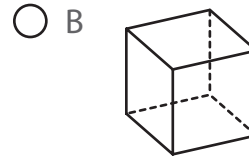
- A cone
 B cube
 C sphere
 D triangular pyramid

- 2** Which solid figure has all points an equal distance from the center?



- A cone
 B cube
 C sphere
 D square pyramid

- 3** Which three-dimensional figure has 5 faces, 8 edges, and 5 vertices?



A *face* is the flat side of a three-dimensional figure.

- 4** Which two solid figures have the same number of faces, edges, and vertices?

- A cube and cylinder
 B sphere and cone
 C cube and square pyramid
 D cube and rectangular prism