Consider a plane "slicing" through a solid. The intersection of the plane and the solid is a two-dimensional shape called a cross section.
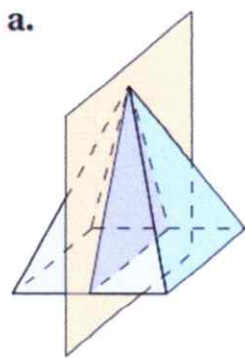
Use the following words to describe the cross-section:

- Triangle
- Circle
- Rectangle
- Pentagon **(5)**
- hexagon **(6)**
- Line segment
- Point
- Vertex

rectangular prism

intersection   plane
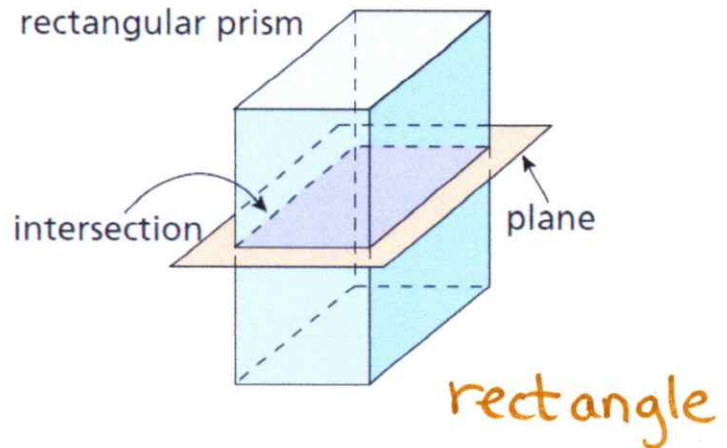
rectangle

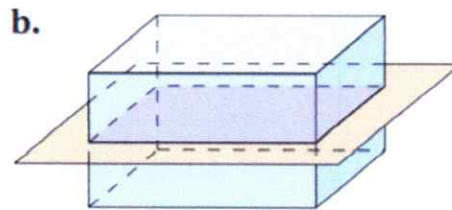Never use the word square; use the word rectangle instead.
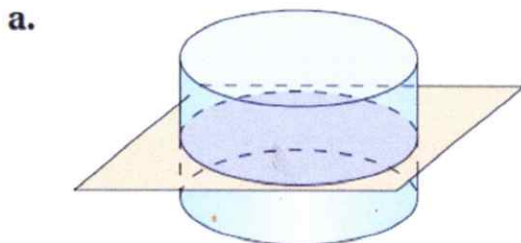
Describe the intersection of the plane and the solid.

a.

triangle
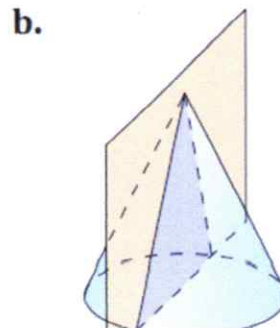
b.

rectangle

c.

triangle

a.

circle

b.
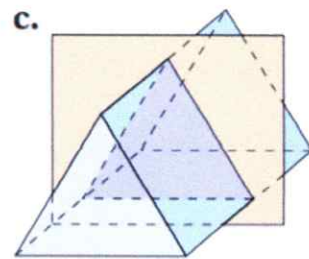
triangle

Describe the intersection of the plane and the solid. p.620-621

1.

triangle

2.

triangle

3.

rectangle

4.

rectangle

5.

triangle

6.

rectangle
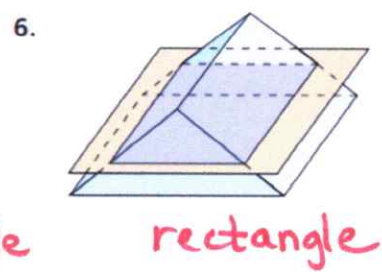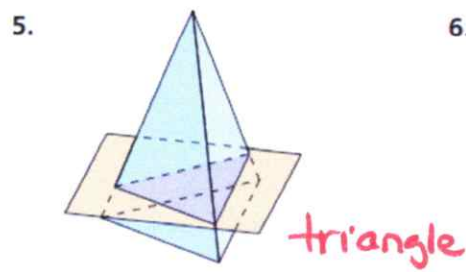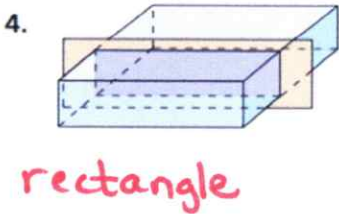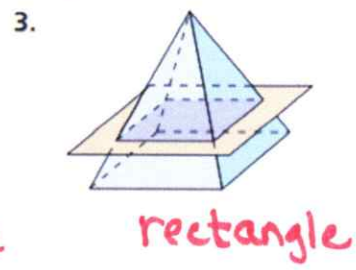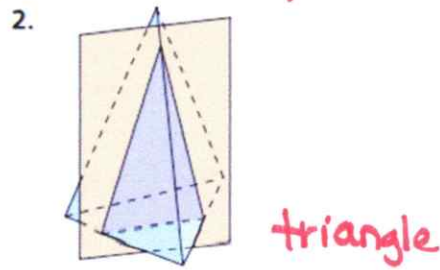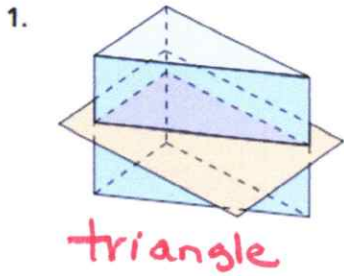
7. **REASONING** A plane that intersects a prism is parallel to the bases of the prism. Describe the intersection of the plane and the prism.

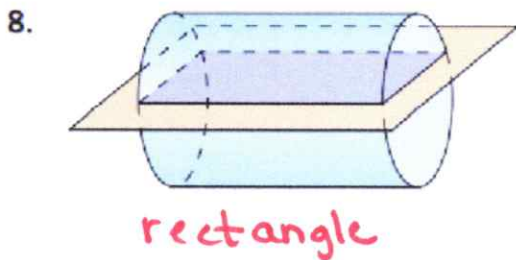*it will be the shape of the base*

8.

rectangle

9.

circle

10.

line segment

11.

circle
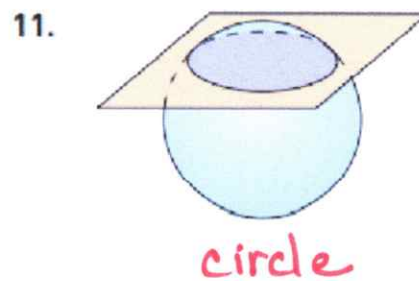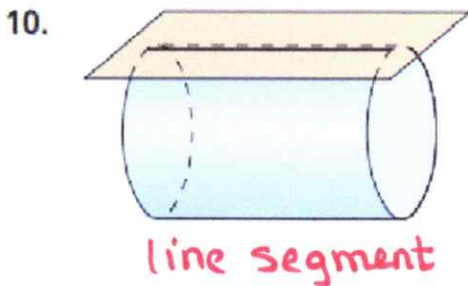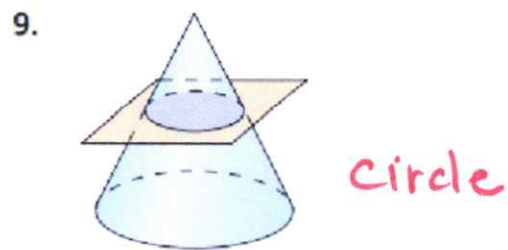
Describe the shape that is formed by the cut made in the food shown.

12.

circle

13.

rectangle

14.

circle
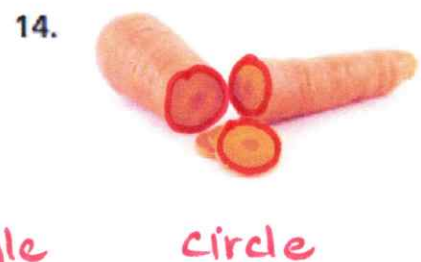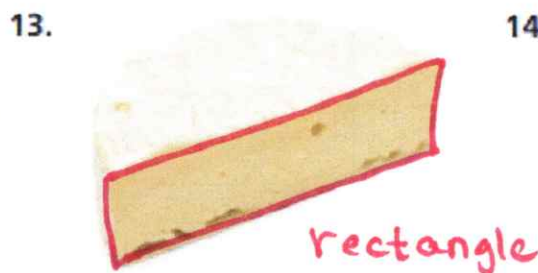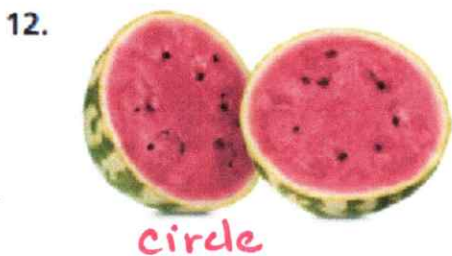
15. **REASONING** Explain how a plane can be parallel to the base of a cone and intersect the cone at exactly one point. *the intersection occurs at the vertex of the cone*