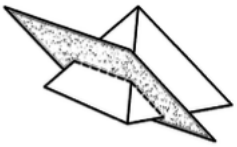
Secondary 3 Honors Name:_____

11-1 Cross-Sections Practice

1. A square pyramid is cut along the shaded plane shown below.

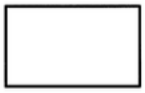


Which of the following is the cross-section of this solid?

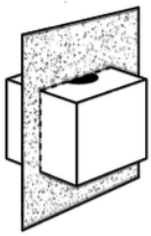
Ⓐ 

Ⓑ 

Ⓒ 

Ⓓ 

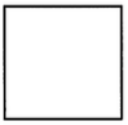
2. A cube with a cylinder cut from its center is cut along the plane shown below.



Which of the following is the cross-section of this solid?

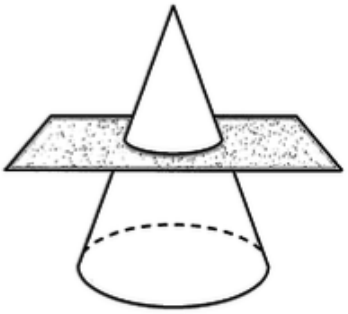
Ⓕ 

Ⓗ 

Ⓖ 

Ⓙ 

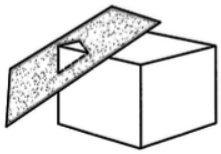
3. A cross-section is cut from the circular cone below.



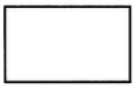
What is the shape of the cross-section?

Ⓐ Square
Ⓑ Semicircle
Ⓒ Triangle
Ⓓ Circle

4. A rectangular prism is cut along the shaded plane shown below.



Which of the following is the cross-section of this solid?

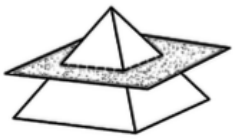
Ⓕ 

Ⓖ 

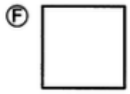
Ⓗ 

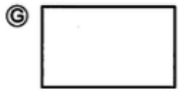
Ⓙ 

5. A square pyramid is cut along the shaded plane shown below.



Which of the following is the cross-section of this solid?

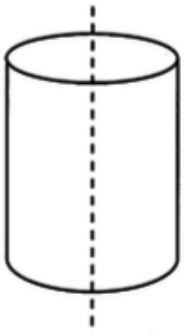
Ⓕ 

Ⓖ 

Ⓗ 

Ⓙ 

6. A cross-section is cut from the cylinder below.

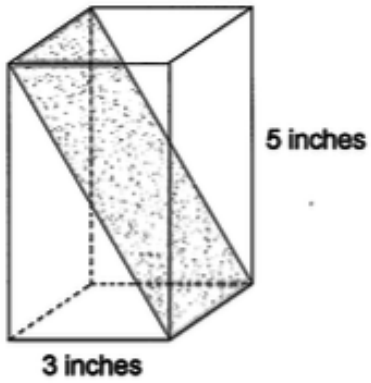


What is the shape of the cross-section?

Ⓐ Rectangle
Ⓑ Circle
Ⓒ Semicircle
Ⓓ Oval

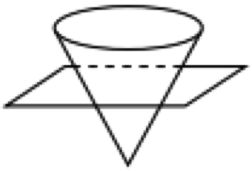
7. Mr. Barth has a piece of foam in the shape of a rectangular prism as shown below. The base is square with sides 3 inches long, and the piece is 5 inches tall. He cut the foam along the diagonal plane as shown by the shaded area.

Find the area of the diagonal cross section.

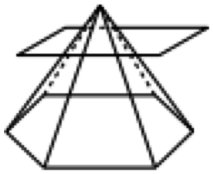


Describe the following cross sections.

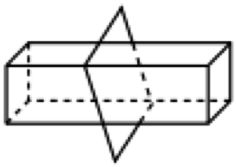
8.



9.



10.

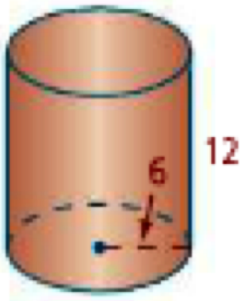


11. What is the cross section formed by a plane that intersects the front, right, top, and bottom faces of a cube?

12. Given the cylinder at the right, use the dimensions to find the area of the following.

a) A horizontal cross section.

b) A vertical cross section through the center.



13. Given the cone at the right, use the dimensions to find the area of the vertical cross section through the vertex.