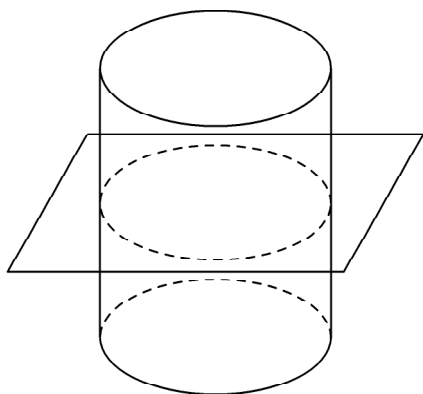


Cross Sections

Multiple Choice

Identify the choice that best completes the statement or answers the question.

- ____ 1. Describe the cross section.



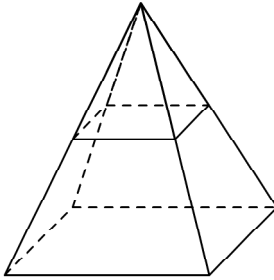
- a. The cross section is a circle.
- b. The cross section is a cylinder.
- c. The cross section is a plane.
- d. The cross section is a parallelogram.

Name: _____

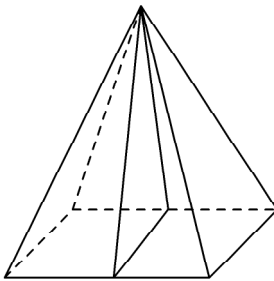
ID: A

_____ 2. A sandwich shop sells cheese. How can the chef cut a square pyramid-shaped piece of cheese to make slices that are squares?

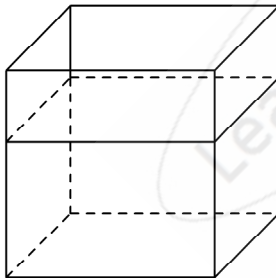
- a. Cut parallel to the base.



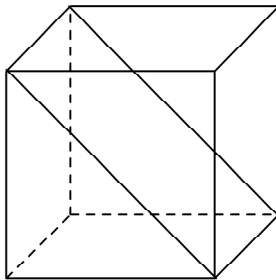
- b. Cut through the vertex and the midpoint of two sides of the base.



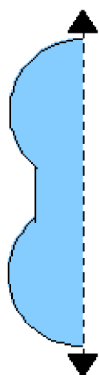
- c. Cut parallel to the base.



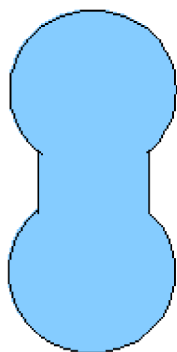
- d. Cut through opposite edges.



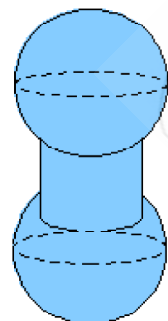
_____ 3. Draw the solid of revolution formed by the shape rotated around the axis given.



a.



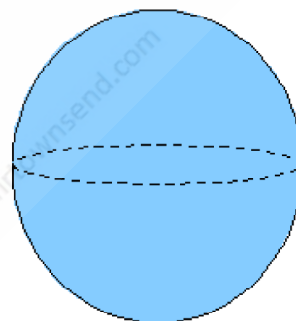
b.



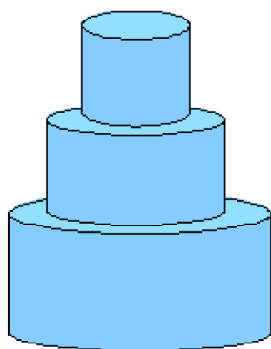
c.



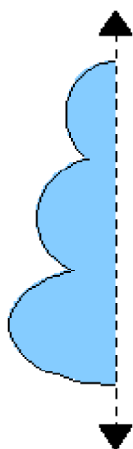
d.



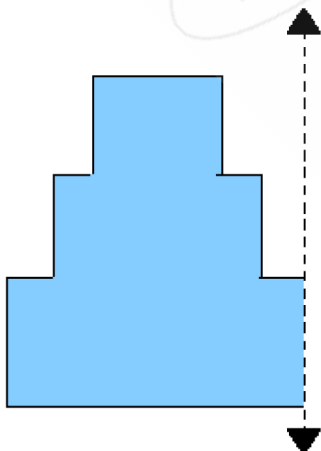
- _____ 4. A layered round cake is a solid of revolution. Draw a two-dimensional shape and an axis of rotation that could form the cake.



a.



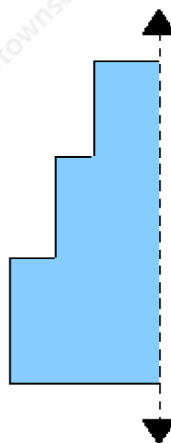
b.



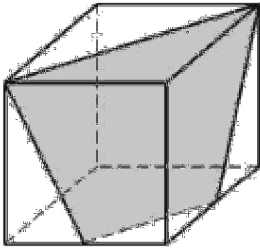
c.



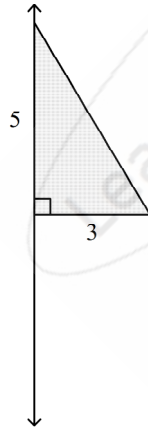
d.



- _____ 5. What best describes the cross section shown on the cube?



- a. square
b. triangle
c. trapezoid
d. rectangle
- _____ 6. What shape is the cross section formed by the intersection of a cone and a plan parallel to the base of the cone?
a. circle
b. oval
c. trapezoid
d. triangle
- _____ 7. The cross section of a three-dimensional figure is a circle. Which figure could it NOT be?
a. cone
b. sphere
c. prism
d. cylinder
- _____ 8. Find the volume of the solid generated by rotating the figure around the given axis. If necessary, use 3.14 for π and round your answer to the nearest hundredth.

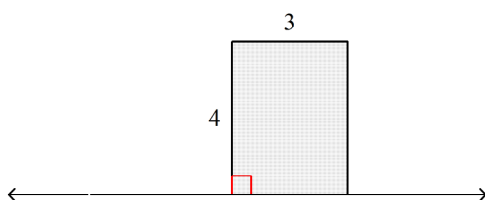


- a. 78.5 cubic units
b. 45 cubic units
c. 47.1 cubic units
d. 141.3 cubic units

Name: _____

ID: A

- _____ 9. Find the volume of the solid generated by rotating the figure around the given axis. If necessary, use 3.14 for π and round your answer to the nearest hundredth.



- a. 301.44 cubic units
- b. 113.04 cubic units
- c. 96 cubic units
- d. 150.72 cubic units

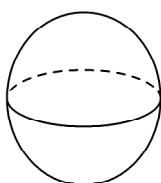
Name: _____

ID: A

____ 10. Which solid of revolution is produced by rotating the shape below 360° about the given axis?



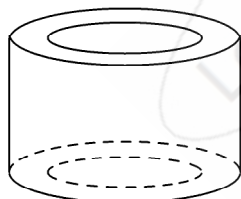
a.



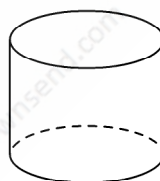
c.



b.



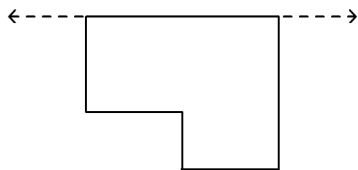
d.



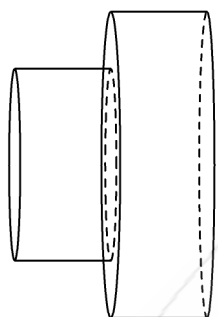
Name: _____

ID: A

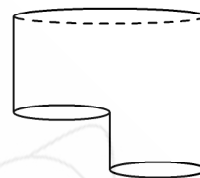
____ 11. Which solid of revolution is produced by rotating the shape below 360° about the given axis?



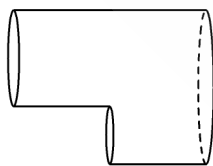
a.



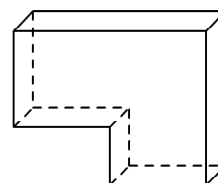
c.



b.



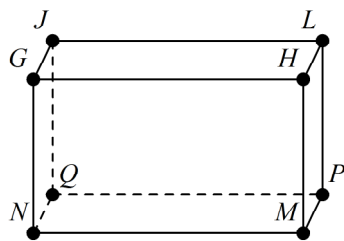
d.



Name: _____

ID: A

____ 12. What is the shape of the cross section created by a plane passing through points N , H , and L ?



- a. an isosceles trapezoid
- b. an isosceles triangle
- c. a rectangle
- d. a right triangle



Cross Sections
Answer Section

MULTIPLE CHOICE

1. A
2. A
3. B
4. D
5. C
6. A
7. C
8. C
9. D
10. D
11. A
12. C

