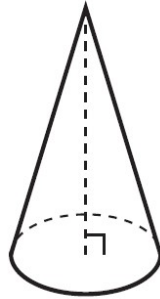


Name _____
Mr. Schlansky

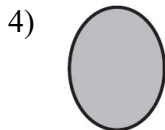
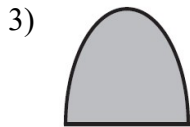
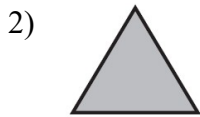
Date _____
Geometry

Cross Sections

1. William is drawing pictures of cross sections of the right circular cone below.



Which drawing can *not* be a cross section of a cone?



2.

Which is *not* a possible two-dimensional cross section of a three-dimensional cylinder?

(1) circle (2) rectangle (3) ellipses (4) triangle

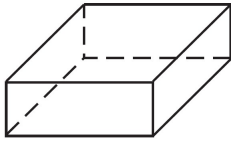
3.

Which type of shape can represent a two-dimensional cross-section of a sphere?

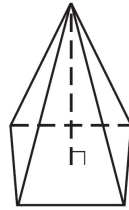
(1) circular (2) triangular (3) square (4) rectangular

4. Which figure can have the same cross section as a sphere?

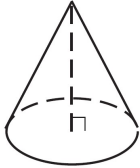
1)



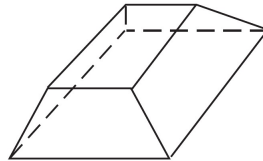
3)



2)



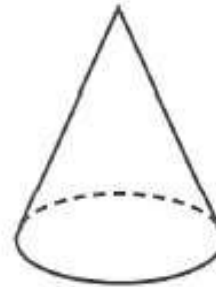
4)



5.

Jennifer is trying to determine if there is any difference in shape for various horizontal cross sections of a cone. She works with two cones that are similar to the one pictured below. Jennifer takes a cross-section of the first cone that is parallel to the base of the cone. Next she takes a cross section of the second cone that is slanted 5 degrees from parallel. What were her results?

- (1) The cross sections were both circles.
- (2) The cross sections were both ellipses.
- (3) The first cross section was a circle and the second cross section was an ellipse.
- (4) The first cross section was an ellipse and the second cross section was a circle.



6. A right cylinder is cut perpendicular to its base. The shape of the cross section is a

- 1) circle
- 2) cylinder
- 3) rectangle
- 4) triangular prism

7.

A pyramid is sliced horizontally into ten solids of equal height from the top of the pyramid to its base. Which of the following is a *possible* description of the faces of the resulting solids?

- (1) circles with increasing radii
- (2) circles with uniform radii
- (3) squares with increasing side lengths
- (4) squares with uniform side lengths