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

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

- [ ] Square
- [ ] Semicircle
- [ ] Curved Trapezoid
- [ ] Triangle

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?

- [ ] Square
- [ ] Semicircle
- [ ] Curved Trapezoid
- [ ] Circle

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

What is the shape of the cross-section?

- [ ] Square
- [ ] Semicircle
- [ ] Curved Trapezoid
- [ ] Circle

4. 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?

- [ ] Square
- [ ] Semicircle
- [ ] Curved Trapezoid
- [ ] Circle
5 Which drawing represents the top view of this solid?

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

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

7 The three-dimensional figure shown is composed of 10 identical cubes.

Which of the following could not represent a top, front, or side view of the figure?
8. A side view of the intersection of a plane and a square pyramid is modeled below.

Which of the following best represents the shape formed by the intersection?

- [ ]
- [ ]
- []
- [ ]

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

Which of the following is closest to the area of the shaded diagonal plane?

- [x] 19.3 square inches
- [ ] 12 square inches
- [ ] 15.8 square inches
- [ ] 17.5 square inches

\[ 3^2 + 5^2 = x^2 \]
\[ 34 = x^2 \]
\[ x = \sqrt{34} \]

\[ A = L \times W \]
\[ A = 3 \sqrt{34} \]
\[ A = 17.49286 \text{ in}^2 \]
10 The net of a specific polyhedron is shown below.

Which polyhedron is represented by this net?

A rectangle
C circle
S semicircle
O oval

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

What is the shape of the cross-section?

A rectangle
C circle
S semicircle
O oval

12 Below is the net of a regular dodecahedron.

How many edges does a regular dodecahedron have?

60
24
50
30

13 Which of the following is a cross-section of a sphere?
14 A square pyramid is cut along the shaded plane shown below.

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

Options:
- [ ] (Correct Answer)
- [ ]
- [ ]
- [ ]
- [ ]

15 The front, side, and top views of a three-dimensional figure composed of 9 identical cubes are shown below.

Which of the following could be the represented figure?

Options:
- [ ] (Correct Answer)
- [ ]
- [ ]
- [ ]
- [ ]
16 Which drawing represents the side view of this solid?

17 A triangular pyramid is cut along the shaded plane shown below. Which of the following is the cross-section of this solid?

18 A hemisphere is cut along the plane shown below. Which of the following is the cross-section of this solid?