1. Refer to the diagram.
   a. Sketch the solid that results after the net has been folded.
   b. Find the surface area of the solid.

2. A cuboctahedron has 6 square faces and 8 equilateral triangle faces. It can be made by slicing off the corners of a cube, as shown.
   a. Sketch a net for a cuboctahedron.
   b. If each edge of a cuboctahedron has length 3 cm, find the surface area of the cuboctahedron.

In Exercises 3–5, find the surface area of the oblique prism.

3. 

4. 

5. 

6. A right prism has a square base, a surface area of 512 in.$^2$, and a height of 12 in. Find the side length of the square base.

7. A right circular cylinder has a surface area of $180\pi$ mm$^2$ and a base of radius 6 mm. Find the height of the cylinder.

8. A right circular cylinder has a surface area of $168\pi$ ft$^2$ and a height of 5 ft. Find the radius of the cylinder.

9. The diagram at the right shows a net for a cereal box. A small spider is at position $S$, and a bug is at position $B$.
   a. According to the net shown, what is the apparent distance between the spider and the bug?
   b. Sketch a different net for the same cereal box, showing a shorter path from the spider to the bug. What is the shortest possible distance that the spider would have to walk to get to the bug?