7.G.6
Solve real-world and mathematical problems involving area, volume, and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms.

7.G.6   Calculator   OH.2025.Q31

A cube has a side length of 4 centimeters.

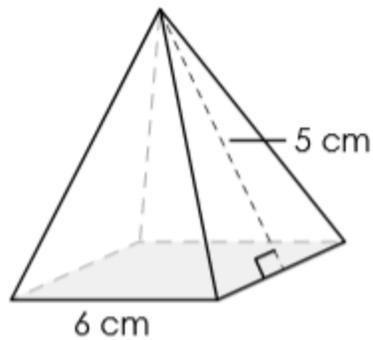What is the surface area, in square centimeters, of the cube?

[   ] *square centimeters*

7.G.6   Calculator   OH.2024.Q33

A right square pyramid measured in centimeters (cm) is shown.

5 cm

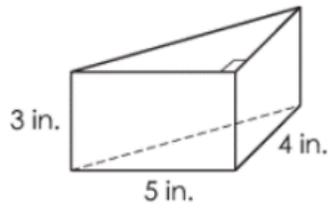6 cm

What is the total surface area of the square pyramid?

Ⓐ 36 square centimeters

Ⓑ 48 square centimeters

Ⓒ 60 square centimeters

Ⓓ 96 square centimeters

7.G.6   Calculator   OH.2022.Q43

A right triangular prism, with measurements in inches (in.), is shown.

3 in.

4 in.

5 in.

What is the volume, in cubic inches, of the right triangular prism?

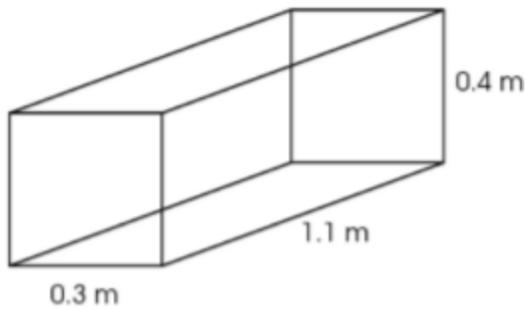| | *cubic inches*

7.G.6   Calculator   OH.2021.Q28

A tank in the shape of a right rectangular prism is shown.

0.4 m

1.1 m

0.3 m

One cubic meter is equivalent to 1,000 liters.

How many liters of water are needed to completely fill the tank?

Ⓐ   132

Ⓑ   180

Ⓒ   1,320

Ⓓ   1,800

A cube has a surface area of 150 square inches $(in.^2)$.

What is the area, in square inches, of one face of the cube?

[   ] $in.^2$

A container in the shape of a rectangular prism holds 651.168 cubic inches when completely filled with water. The container has a length of 12.6 inches and a width of 15.2 inches.
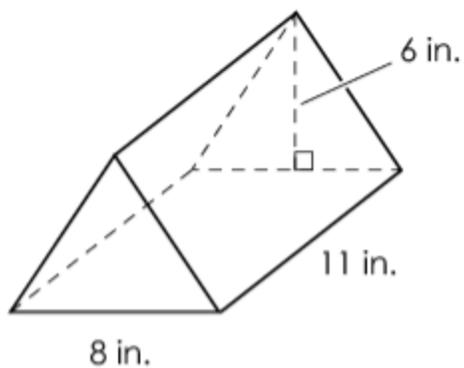
What is the height, in inches, of the container?

[   ] $inches$

A right triangular prism is shown.

6 in.

11 in.

8 in.

What is the volume, in cubic inches, of the prism?

_____ *cubic inches*