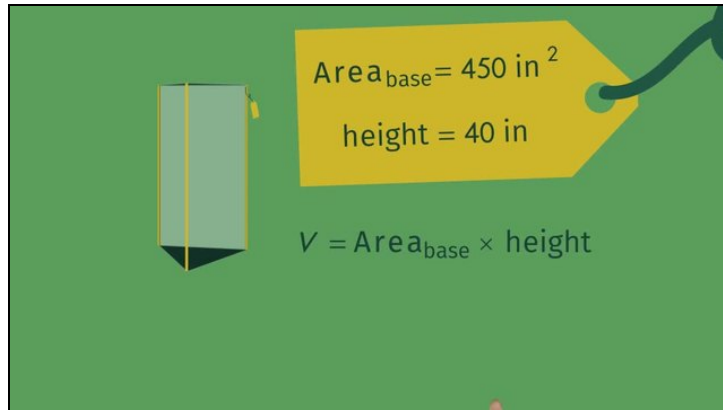




Printable Worksheets from [sofatutor.com](https://www.sofatutor.com)

# Volume of Prisms



- 1 **Review the area of shapes and names of 3-D objects.**
- 2 Identify the steps for calculating volume of rectangular prisms.
- 3 Sort the steps for calculating the volume of a triangular prism.
- 4 Calculate volume of right prisms.
- 5 Solve real-world problems involving the volume of right prisms.
- 6 Calculate the volume of the 3D object
- + with lots of tips, answer keys, and detailed answer explanations for all of the problems.



The complete package, **including all problems, hints, answers, and detailed answer explanations** is available for all [sofatutor.com](https://www.sofatutor.com) subscribers.



### Review the area of shapes and names of 3-D objects.

Match the area formula and 3-D name shape to the correct base shape.

rectangular prism <b>1</b>	cube <b>2</b>	triangular prism <b>3</b>	cone <b>4</b>
$A = s^2$ <b>5</b>	$A = lw$ <b>6</b>	square prism <b>7</b>	$A = \frac{1}{2}bh$ <b>8</b>
cylinder <b>9</b>	$A = \pi r^2$ <b>10</b>		

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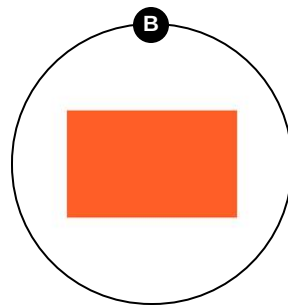
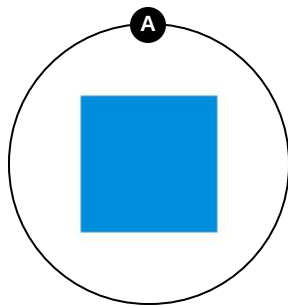
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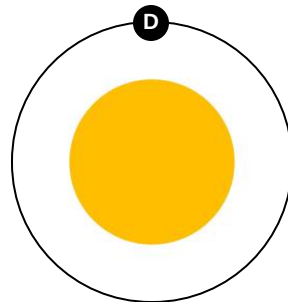
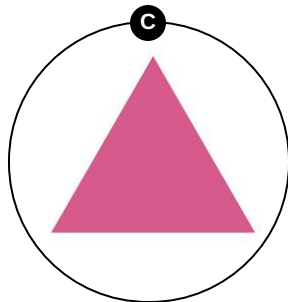
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## Hints for solving these problems

1  
of 6

### Review the area of shapes and names of 3-D objects.

#### Hint #1

The name of a 3-D prism generally includes the shape of their base. However, there are a few exceptions.

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#### Hint #2

To calculate the area of a triangle we need to know the dimensions of its base and height.

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#### Hint #3

The area of a circle with a radius of 2 cm is approximately equal to  $12.57 \text{ cm}^2$ .

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#### Hint #4

A cone is a solid or hollow object which tapers from a circular base to a point.

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#### Hint #5

A cylinder is a solid object with:

- two identical flat ends that are circular
  - and one curved side.
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## Answers and detailed answer explanations for these problems

1  
of 6

### Review the area of shapes and names of 3-D objects.

**Answer key:** A: 2, 5, 7 // B: 1, 6 // C: 3, 8 // D: 4, 9, 10

#### *Blue Square\**

- The area of a square with side lengths,  $s$ , is  $A = s^2$ .
- A **cube** and a **square prism** are two 3-D shapes with a square base.

#### **Red Rectangle**

- The area of a rectangle with length  $l$  and width  $w$  is  $A = lw$ .
- A **rectangular prism** is a 3-D shape with a rectangular base.

#### **Pink Triangle**

- The area of a triangle with base  $b$  and height  $h$  is,  $A = \frac{1}{2}bh$ .
- A **triangular prism** is a 3-D shape with a triangular base.

#### **Yellow Circle**

- The area of a circle with radius  $r$  is,  $A = \pi r^2$ .
- A **cylinder** and a **cone** are two 3-D shapes with a circular base.