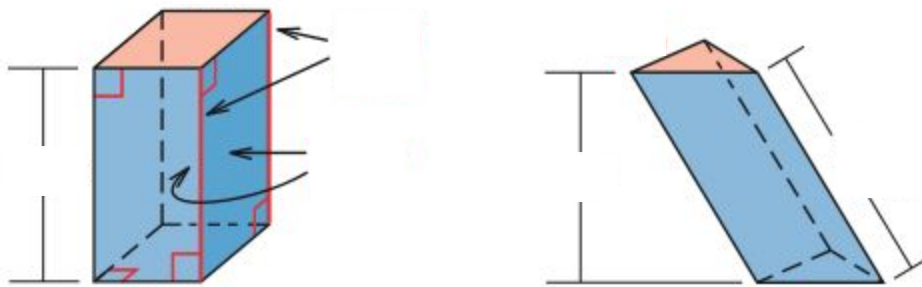


**Prism:**

**Lateral Faces:**

**Altitude/Height of a Prism:**



**Surface Area:**

**Lateral Area:**

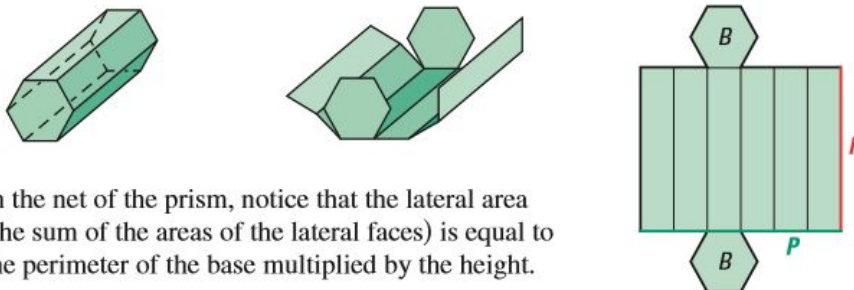
**Cylinder:**

**Surface Area Formulas:**

**Right Prism:**

$$S = 2B + Ph$$

Where  $B$  is the area of a base,  $P$  is the perimeter of a base, and  $h$  is the height.



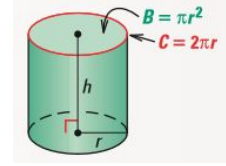
In the net of the prism, notice that the lateral area (the sum of the areas of the lateral faces) is equal to the perimeter of the base multiplied by the height.

12.2 Surface Area of Prisms and Cylinders  
Geometry CP

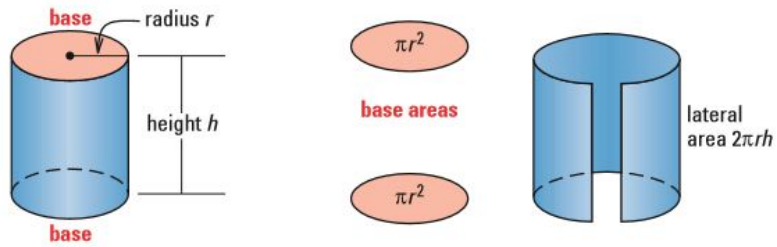
**Right Cylinder:**

$$S = 2B + Ch$$

=

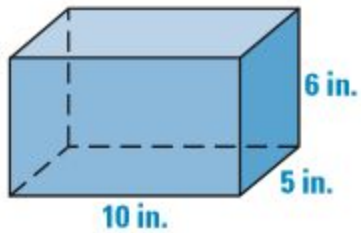


Where  $B$  is the area of the base,  $C$  is the circumference of a base,  $r$  is the radius, and  $h$  is the height.

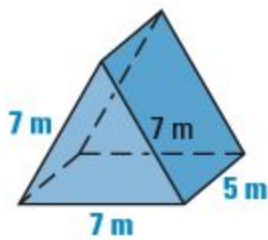


1. Find the surface area of:

a.

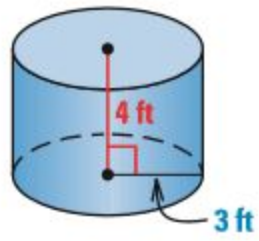


b.

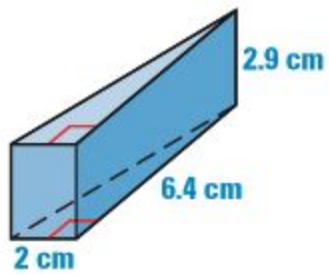


12.2 Surface Area of Prisms and Cylinders  
Geometry CP

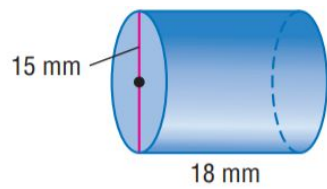
c.



d.



e.



12.2 Surface Area of Prisms and Cylinders  
Geometry CP

2. Find the height of the cylinder which has a radius of 6.5 centimeters and a surface area of 592.19 square centimeters.

