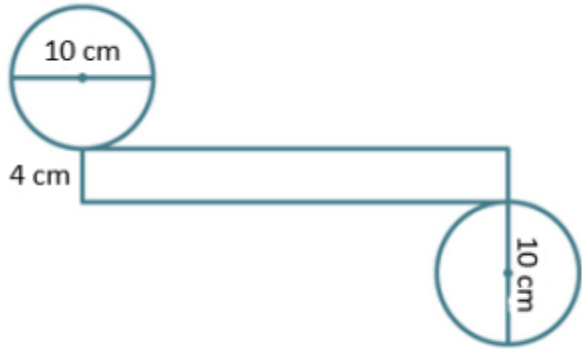
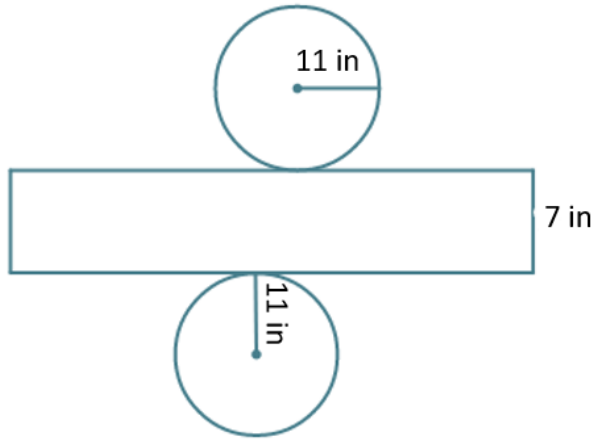


Surface Area of Cylinders

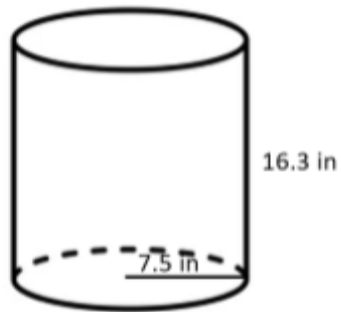
Notes	Video Links & Practice Space
<p>Vocabulary</p> <p>cylinder: a figure containing two _____, parallel, circular bases whose edges are connected by a curved surface; the net of the cylinder consists of a parallelogram and two circles</p> <p>net : a two-dimensional _____ that can be folded or made into a three-dimensional figure.</p> <p>pi (π): the symbol designating the _____ of the circumference of a circle to its diameter; it is an irrational number; common approximations are: 3.14, $\frac{22}{7}$, $\frac{355}{113}$</p> <p>surface area: the sum of the _____ of all of the 2-D shapes that make up the net, or surface, of the 3-D object</p>	<p>Vocabulary (1:05)</p>
<p>Find Surface Area of a Cylinder Using a Net</p> <p>Example 1:</p>  <p>Example 2:</p>	<p>Find SA of Cylinder Using Net (7:07)</p>



Find Surface Area Using a Formula

Example 1:

$$SA = 2\pi r^2 + 2\pi rh$$



Example 2:

$$SA = 2\pi r^2 + 2\pi rh$$

You are wrapping a gift that is in the shape of a cylinder and don't want to waste any paper. The height of the cylinder is 18 inches and the diameter is 6 inches. How much paper do you need? Use $\frac{22}{7}$ for pi.

[Find SA Using a Formula \(6:39\)](#)

Practice

1. I am marketing my new lip gloss and will have a label that will cover the tube and bottom not the top. The height of the tube is 5 inches, and the diameter is 3 inches. What size of a label will I need?
2. Butter is packaged in cylindrical gallon tubs. A tub of butter has a total surface area of 232.62 square inches. If the diameter of the tub is 6 inches, what is its height? Use $\pi = 3.14$.
3. A cylindrical can of cheese has a label wrapped around the outside, touching end to end. The only parts of the can not covered by the label are the circular top and bottom of the can. If the area of the label is 176π square inches and the radius of the can is 4 inches, what is the height of the can?

[Surface Area Practice Problems \(13:38\)](#)