TOPIC 13-4: SURFACE AREA AND VOLUME OF CYLINDERS
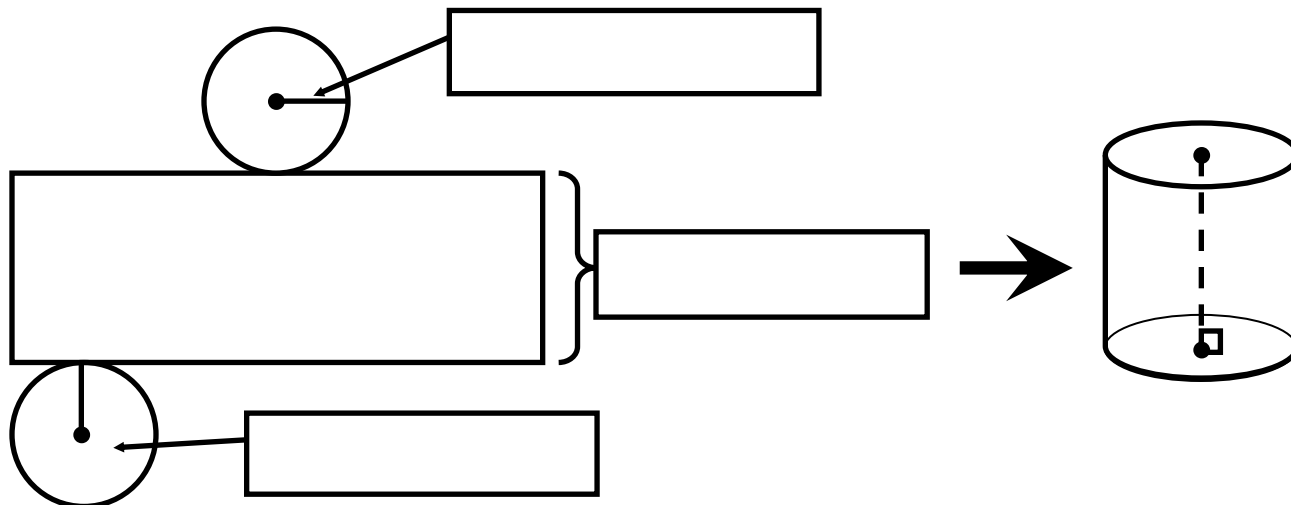
The figure below is a net for a right cylinder:

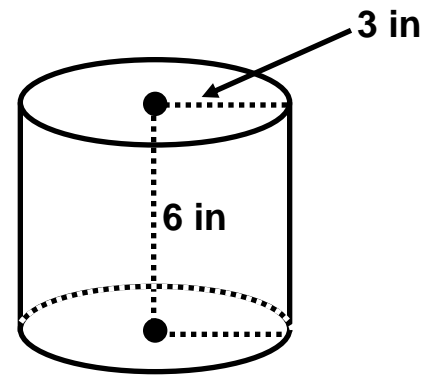Recall that *LATERAL AREA* measures the area of everything

EXCEPT _____ _____.

TOTAL AREA INCLUDES _____ _____.

VOLUME measures the number of _____ units in the

_____ of a 3-dimensional object.

Since the base of a cylinder is a _____, B = _____.

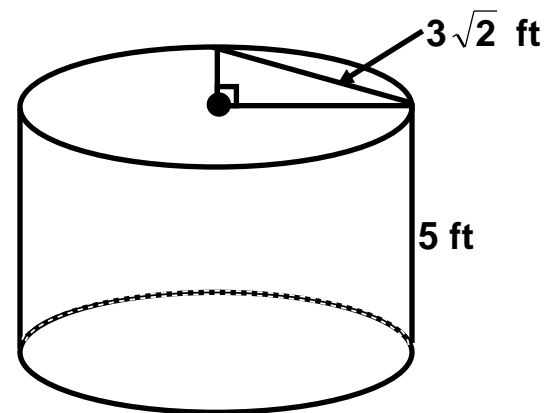**EXAMPLE 1 For the cylinder below, find the EXACT Lateral Area, Total Area, and Volume.**

3 in

6 in

LA = _____

TA = _____

V = _____

- -

EXAMPLE 2 For the cylinder below, find Lateral Area, Total Area, and Volume. Round your answers to the nearest tenth.

$3\sqrt{2}$ ft
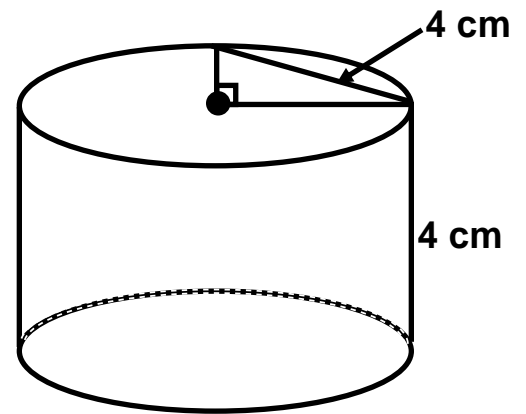
5 ft

LA = _____

TA = _____

V = _____

EXAMPLE 3 **For the cylinder below, find the EXACT Lateral Area, Total Area, and Volume.**

4 cm

4 cm

LA = _____

TA = _____

V = _____

- -

EXAMPLE 4 **Find the Total Area of a cylinder with a radius of 6 cm and a height of 8 cm.**

TA = _____

- -

EXAMPLE 5 **The Volume of a cylinder is 81π in³. If the radius is 3 in, find the height.**

h = _____