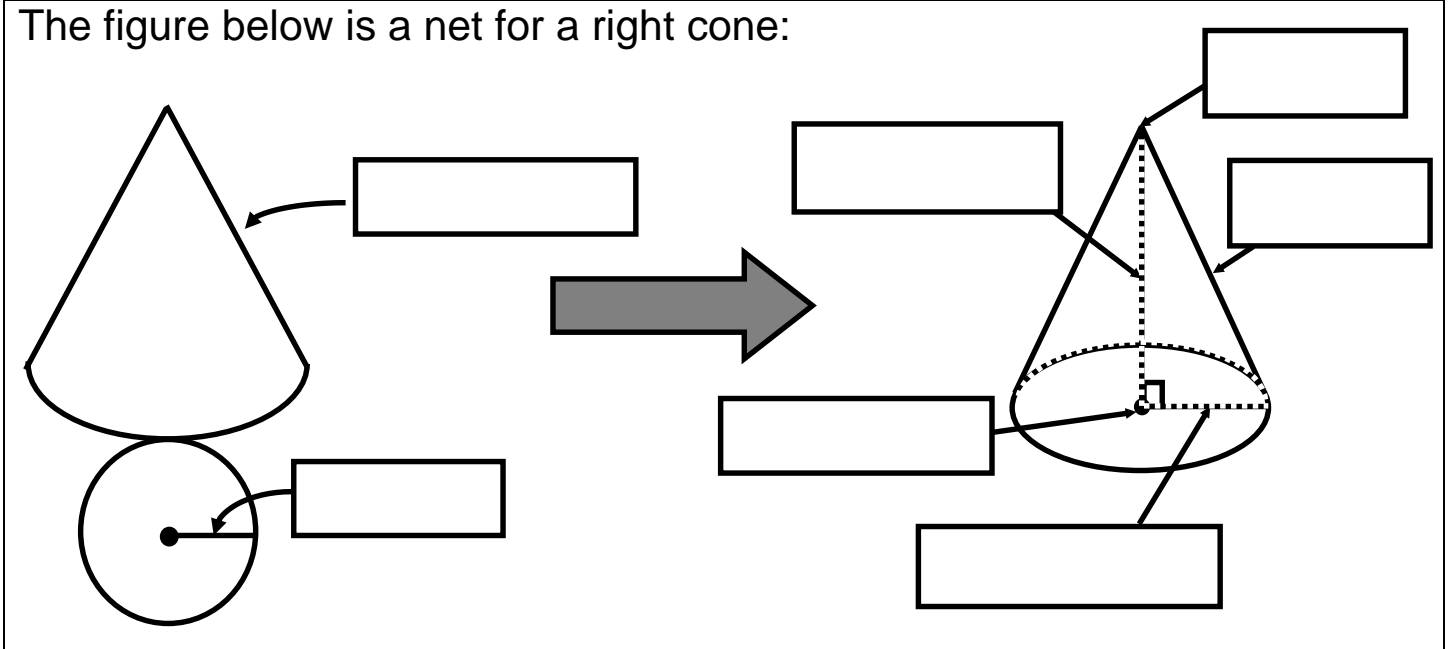


## NOTES 12.3/12.5

### LATERAL AREA, SURFACE AREA, & VOLUME OF CONES

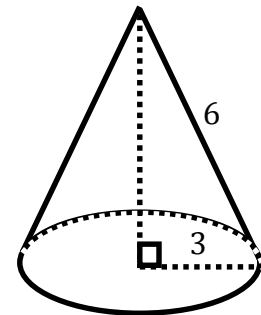
The figure below is a net for a right cone:



#### FORMULAS

<b>LATERAL AREA:</b>	<b>SURFACE AREA:</b>	<b>VOLUME:</b>

**EXAMPLE 1:** For the cone below, find the **EXACT** *Lateral Area*, *Surface Area*, and *Volume*.

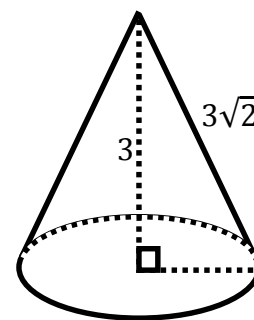


LA = \_\_\_\_\_

SA = \_\_\_\_\_

V = \_\_\_\_\_

**EXAMPLE 2:** For the cone below, find the EXACT *Lateral Area*, *Surface Area*, and *Volume*.



LA = \_\_\_\_\_

SA = \_\_\_\_\_

V = \_\_\_\_\_

**EXAMPLE 3:** If the *volume* of a cone is  $12\pi \text{ ft}^3$  and the *radius* is  $3 \text{ ft}$ , find the EXACT *height*, *slant height*, *Lateral Area*, and *Surface Area*.

$h$  = \_\_\_\_\_

$l$  = \_\_\_\_\_

LA = \_\_\_\_\_

SA = \_\_\_\_\_