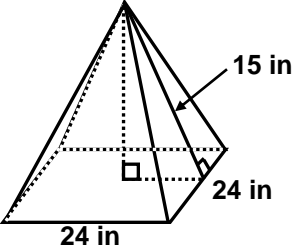
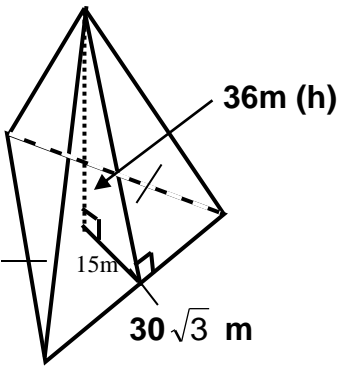
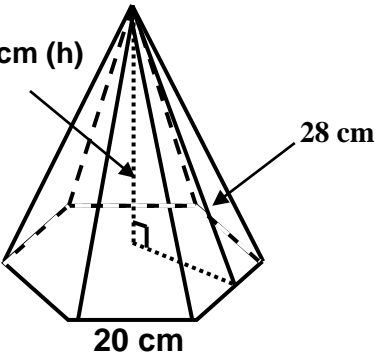


NAME \_\_\_\_\_ DATE \_\_\_\_\_ PER. \_\_\_\_\_

**REVIEW #14: SURFACE AREA & VOLUME OF PYRAMIDS & CONES**

**PART 1: Surface Area & Volume of Pyramids**

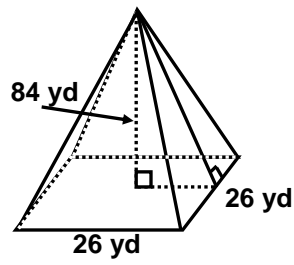
For each of the pyramids, find a) Lateral Area, b) Total Area, and c) Volume.

<p>1. LA = _____</p> <p>TA = _____</p> <p>V = _____</p>		<p><i>Parts First!</i></p> <p><math>l =</math></p> <p><math>h =</math></p> <p><math>a =</math></p> <p><math>B =</math></p> <p><math>P =</math></p>
<p>2. LA = _____</p> <p>TA = _____</p> <p>V = _____</p>		<p><i>Parts First!</i></p> <p><math>l =</math></p> <p><math>h =</math></p> <p><math>a = 15m</math></p> <p><math>B =</math></p> <p><math>P =</math></p>
<p>3. LA = _____</p> <p>TA = _____</p> <p>V = _____</p>		<p><i>Parts First!</i></p> <p><math>l = 28cm</math></p> <p><math>h =</math></p> <p><math>a =</math></p> <p><math>B =</math></p> <p><math>P =</math></p>

4. LA = \_\_\_\_\_

TA = \_\_\_\_\_

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

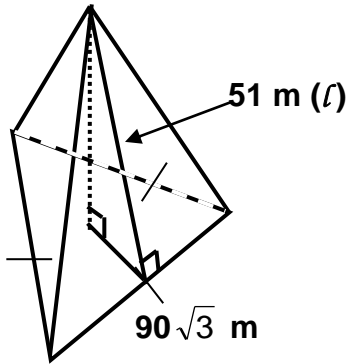


*Parts First!*  
 $l =$   
 $h =$   
 $a =$   
 $B =$   
 $P =$

5. LA = \_\_\_\_\_

TA = \_\_\_\_\_

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

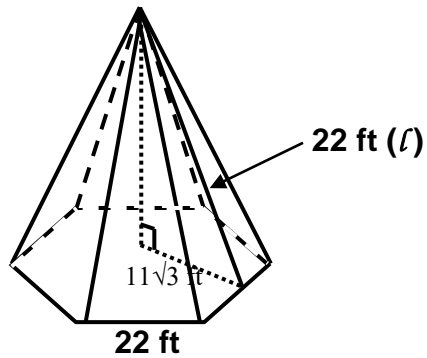


*Parts First!*  
 $l =$   
 $h =$   
 $a = 45$   
 $B =$   
 $P =$

6. LA = \_\_\_\_\_

TA = \_\_\_\_\_

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



*Parts First!*  
 $l =$   
 $h =$   
 $a = 11\sqrt{3} \text{ ft}$   
 $B =$   
 $P =$

**Find the indicated measure.**

7. $V =$ _____	The base of a triangular pyramid has an area of $15\sqrt{3}$ square yards and a height of 4 yd. Find the volume.
8. $TA =$ _____	A triangular pyramid has a base with each side measuring $6\sqrt{3}$ cm. Its slant height is 8 cm and its base area is $27\sqrt{3}$ cm <sup>2</sup> . Find the Total Area.
9. $V =$ _____	A square pyramid has a base edge of 40 inches and a slant height of 29 in. Find its Volume.
10. $LA =$ _____	A square pyramid has a base edge of 3 cm and a slant height of 6 cm. Find its Lateral Area.

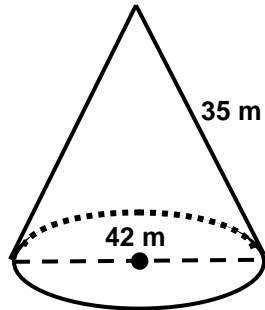
**PART 2: Surface Area & Volume of Cones**

Find the measure(s) indicated. Answers to even numbered problems should be rounded to the nearest thousandth.

11. LA = \_\_\_\_\_

TA = \_\_\_\_\_

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

*Parts First!*

$l =$

$h =$

$r =$

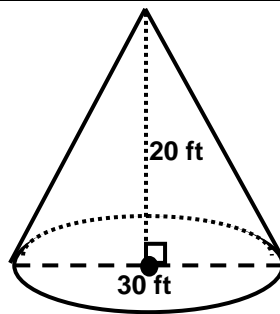
$B(\pi r^2) =$

$P(2\pi r) =$

12. LA = \_\_\_\_\_

TA = \_\_\_\_\_

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

*Parts First!*

$l =$

$h =$

$r =$

$B(\pi r^2) =$

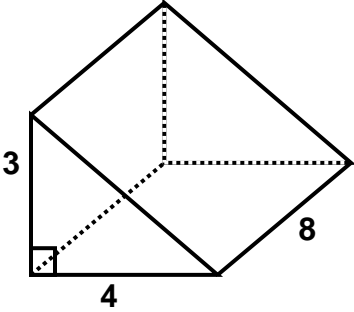
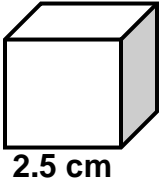
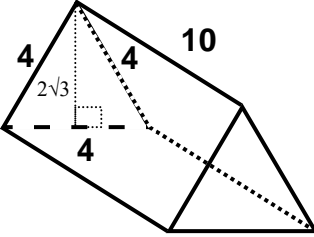
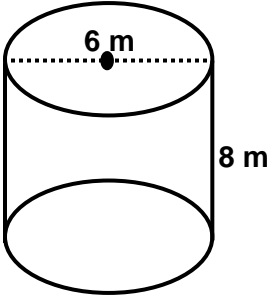
$P(2\pi r) =$

13. V = \_\_\_\_\_

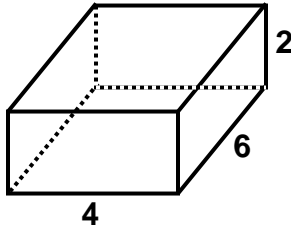
Find the Volume of a right circular cone with a radius of 6 cm and an altitude of 10 cm.

14. $h =$ _____	The base area of a cone is $49\pi \text{ m}^2$ and the volume is $196\pi \text{ m}^3$ . Find its height.
15. $h =$ _____	The Lateral Area of a cone is $60\pi \text{ in.}$ The radius of the cone is $6\text{in.}$ Find the height of the cone.
16. _____	True or False:  The slant height will always be longer than the altitude of a pyramid or cone.
17. _____	A pyramid with a rectangular base has a volume of 180 cubic inches and a height of 4 inches. The width of the rectangular base is 6 inches. Find the length in inches of the rectangular base.

## Review

<p>18. Name: _____</p> <p>LA = _____</p> <p>TA = _____</p> <p>V = _____</p>	
<p>19. Find the <b>VOLUME</b> of a cube with a base edge of 2.5 cm:</p> <p>_____</p>	
<p>20. Find the <b>TOTAL AREA</b> of the figure at right.</p> <p>_____</p>	
<p>21. LA = _____</p> <p>TA = _____</p> <p>V = _____</p>	<p>Find the Lateral Area, Total Area, and Volume of the right circular cylinder:</p> 

22. Find the **VOLUME** of the figure at right.



\_\_\_\_\_

23. Height =

\_\_\_\_\_

The Volume of a cylinder is  $250\pi$  cubic units. If the radius is 5 units, find the height.

24. Height =

\_\_\_\_\_

The Total Area of a cylinder is  $81\pi$  square units. If the radius is 3 units, find the height.