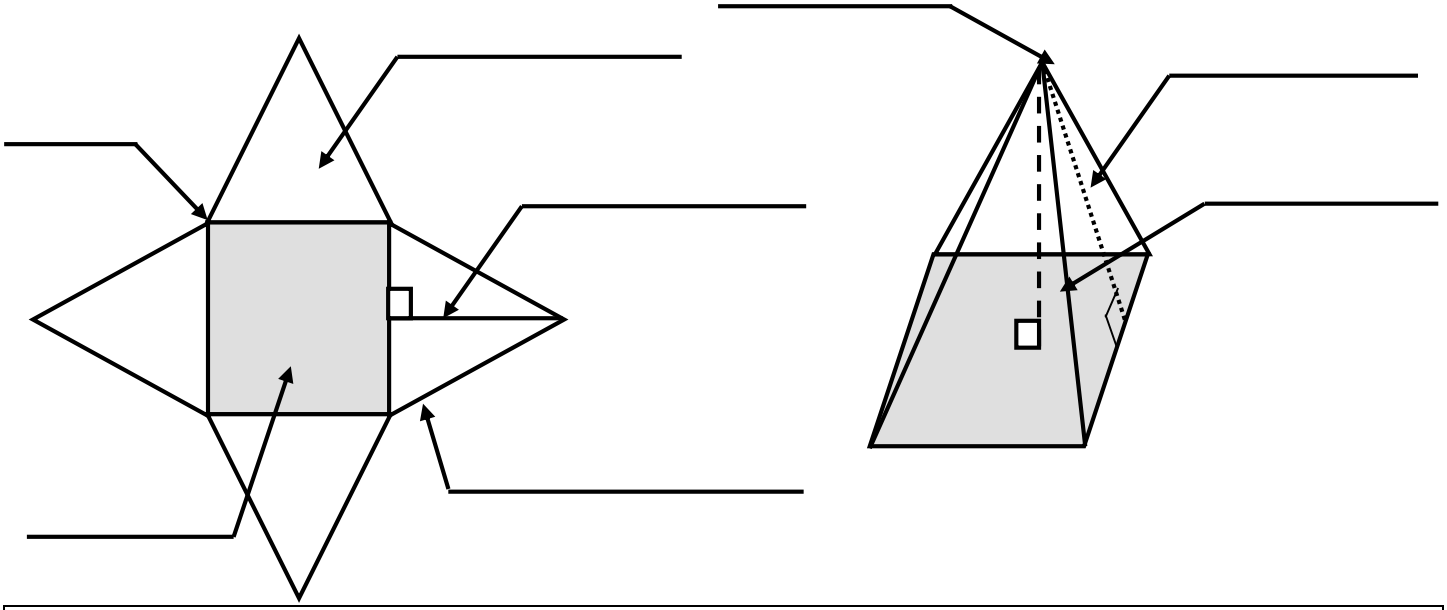
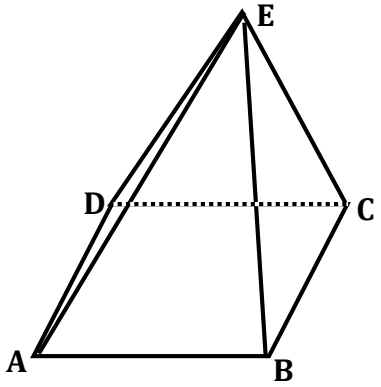
NOTES 12.3/12.5
LATERAL AREA, SURFACE AREA & VOLUME OF PYRAMIDS



EXAMPLE 1: Name each of the following.



Vertex:_____ **Base:**_____

Lateral Faces:_____

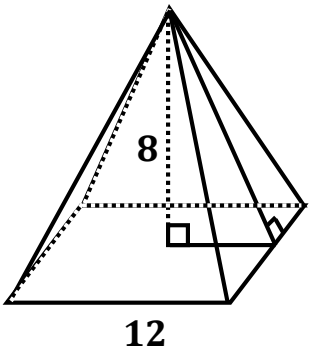
_____

Lateral Edges:_____

Base Edges:_____

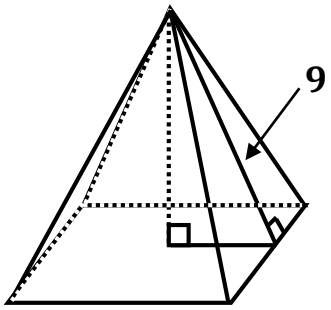
EXAMPLE 2: Find the indicated values.

a) Find the slant height.



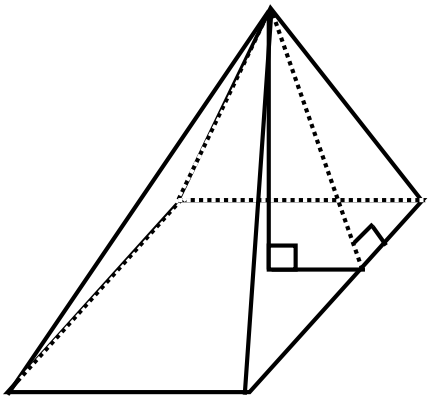
$l =$_____

b) If the perimeter of the base is $16\sqrt{2}\ units$, find the height.



$h =$_____

EXAMPLE 3: A square pyramid has base edges of 10 and lateral edges of 13. Find its slant height.



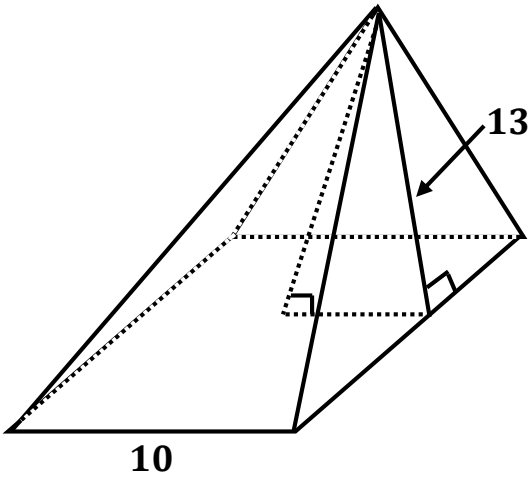
$l =$_____

FORMULAS:

$$LATERAL\ AREA = \frac{1}{2}Pl$$
$$SURFACE\ AREA = \mathrm{LA} + \mathrm{B}$$
$$VOLUME = \frac{1}{3}\mathrm{B}h$$

$P = perimeter\ of\ the\ base$
$l = slant\ height$
$B = area\ of\ the\ base$
$h = height\ of\ the\ pyramid$

EXAMPLE 4: Find the $Lateral\ Area$, $Surface\ Area$, and $Volume$ of the square pyramid below.



LA = _____

SA = _____

V = _____