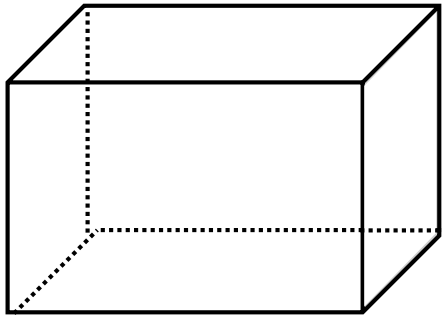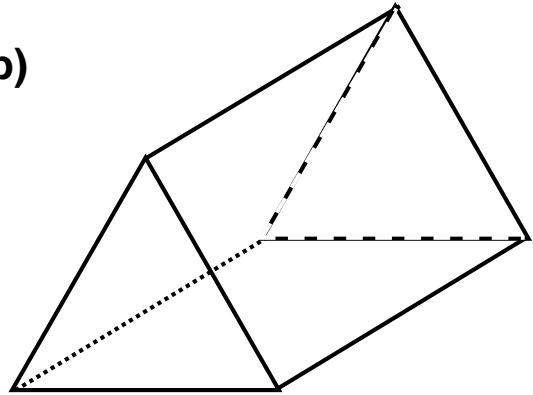# NOTES 12.2/12.4a
LATERAL AREA, SURFACE AREA & VOLUME OF PRISMS

EXAMPLE 1: Label the parts of the prisms below.

a)

b)

FORMULAS:

$$LATERAL\ AREA = Ph$$

$$SURFACE\ AREA = LA + 2B$$

$$VOLUME = Bh$$

$P = perimeter\ of\ the\ base$

$B = area\ of\ the\ base$
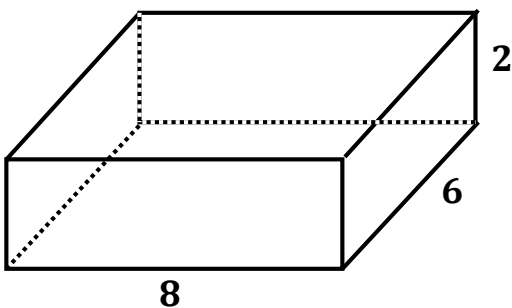
$h = height\ of\ the\ prism\ (distance\ between\ the\ 2\ bases)$

EXAMPLE 2: Name the prism below. Then find its *Lateral Area*, *Surface Area*, and *Volume*.
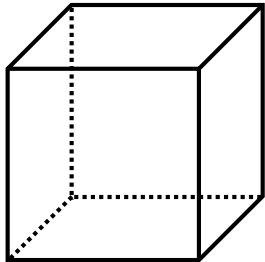
Name:_____

LA = _____

SA = _____

V = _____

2

6

8

EXAMPLE 3: Find the *Lateral Area*, *Surface Area*, **and** *Volume*
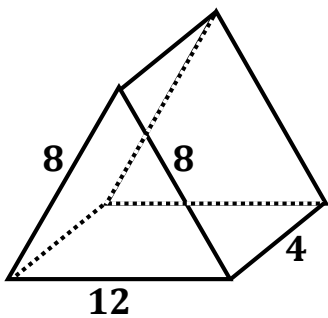of the cube below if each edge is 5 *cm*.

LA = _____

SA = _____

V = _____

EXAMPLE 4: Name the prism below. Then, find its *Lateral Area*,
Surface Area, **and** *Volume*.

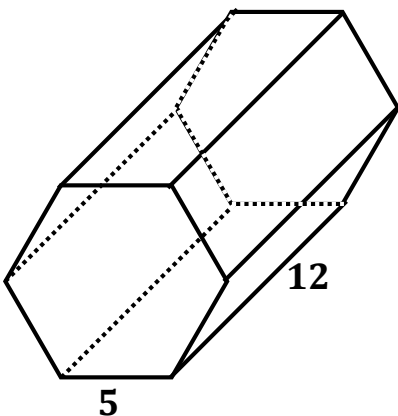Name:_____

LA = _____

SA = _____

V = _____

8   8

4

12

EXAMPLE 5: Name the regular prism below. Then, find its
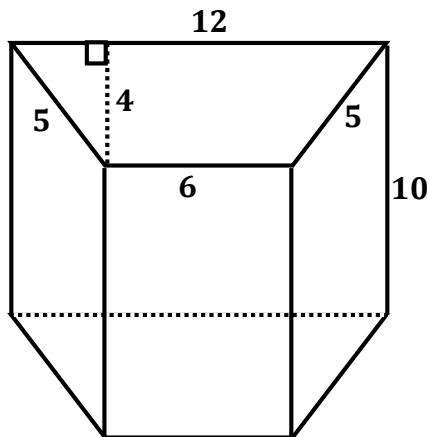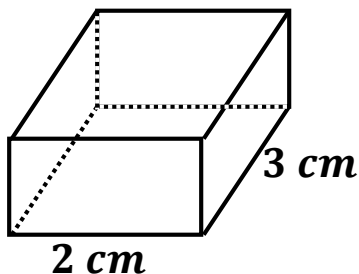*Lateral Area*, *Surface Area*, **and** *Volume*.

Name:_____

LA = _____

SA = _____

V = _____

12

5

EXAMPLE 6: Name the prism below. Then, find its $Lateral\ Area$, $Surface\ Area$, and $Volume$.

12

4

5

5

6

10

Name:_____

$LA =$ _____

$SA =$ _____

$V =$ _____

EXAMPLE 7: The $Volume$ of the rectangular prism is $24\ cm^3$. Find its $height$, $Lateral\ Area$, and $Surface\ Area$.

$3\ cm$

$2\ cm$

$h =$ _____

$LA =$ _____

$SA =$ _____

EXAMPLE 8: The base of a triangular prism is an isosceles right triangle with legs of $3\ cm$. The height of the prism is $10\ cm$. Find its $Lateral\ Area$, $Surface\ Area$, and $Volume$.

$LA =$ _____

$SA =$ _____

$V =$ _____