

4/19/12 10.7 Volume of a Prism

P. 510

Boxes in one layer  $\times$  # of layers = # of boxes

$$\underbrace{3 \times 4}_{\text{boxes in one layer}} \times \overset{\uparrow}{2}_{\text{layers}} = 24 \text{ boxes}^3$$

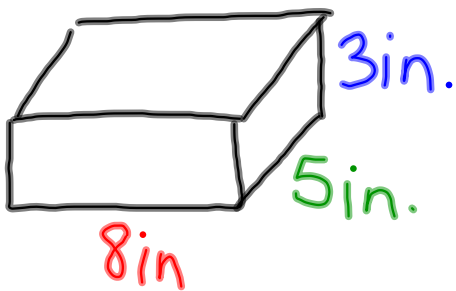
Volume: of a solid is the amount of space the solid occupies.

\* VOLUME IS MEASURED IN CUBIC UNITS.

Formula:  $V = lwh$

Volume of Rectangular Prism

Volume = length x width x height



$$V = 8 \times 5 \times 3$$

$$\quad \quad \quad \vee$$
$$40 \times 3$$

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$$V = 120 \text{ in. } \textcircled{3}$$

P. 511 Ex2: #s 1-3

①  $40\text{m}^3 = 40 \text{ cubed meters}$

②  $432\text{ft}^3$

③  $1,600\text{in}^3$

P.511 Ex3:

$$V = lwh$$

$$21,600 = l \times 30 \times 12$$

$$21,600 = l \times 360 \quad 360 \overline{) 21,600}$$

$$60m = l$$

P. 511 #s 4-5

④ 50m

⑤ 2ft

In Class:

P.512-513 #s 6-19

HW: WS 10.7

