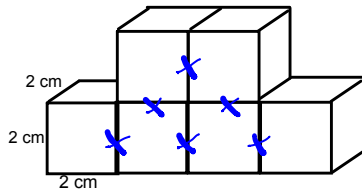


## Quiz

Calculate the surface area of the following composite object. Please show ALL WORK.



$$\begin{aligned} \# \text{ sides} &= 6 \text{ cubes} \times 6 \text{ sides} \\ &= 36 \text{ sides} \end{aligned}$$

$$\text{Overlap} = 12 \text{ sides}$$

$$\begin{aligned} \text{Visible sides} &= 36 - 12 \\ &= 24 \text{ sides} \end{aligned}$$

$$\begin{aligned} A &= b \times h \times 24 \\ &= (2)(2)(24) \\ &= 96 \text{ cm}^2 \end{aligned}$$

**CONCEPT REINFORCEMENT:****MMS9**

**PAGE 40: #3, 4 and 5**

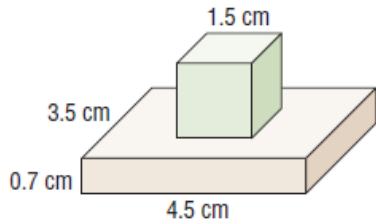
**PAGE 41: #6 (count bottom), 8 (no bottom but have to paint overhang) and 9 (no bottoms)**

**PAGE 42: #10, 11 (no bottom) and 13**

**PAGE 43: #14 (no bottom) and 15 (the cylinder is solid, not hollow)**

16. Determine the surface area of each composite object. What effect does the overlap have on the surface area?

a) rectangular prism and cube



Small Box

$$A = bh \times 6$$

$$= (1.5)(1.5) \times 6$$

$$= 13.5 \text{ cm}^2$$

A large box

A front/back

$$= bh \times 2$$

$$= (4.5)(0.7) \times 2$$

$$= 6.3 \text{ cm}^2$$

A top/bottom =  $bh \times 2$

$$= (4.5)(3.5) \times 2$$

$$= 31.5 \text{ cm}^2 \checkmark$$

$$A(\text{Overlap}) = bh$$

$$= (1.5)(1.5) \times 2$$

$$= 4.50 \text{ cm}^2$$

A(ends) =  $bh \times 2$

$$= (3.5)(0.7) \times 2$$

$$= 4.9 \text{ cm}^2$$

$$A_{\text{Total}} = 13.5 + 6.3 + 31.5 + 4.9 - 4.5$$

$$= 51.7 \text{ cm}^2$$

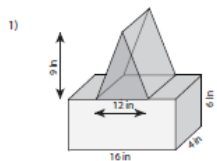
Name: \_\_\_\_\_

Score: \_\_\_\_\_

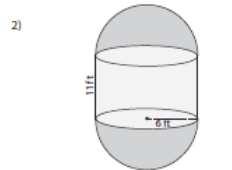
**Volume - Compound Shapes**

Sheet 1

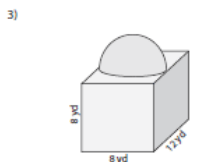
Find the volume of each figure. Round the answer to two decimal places. (use  $\pi = 3.14$ )



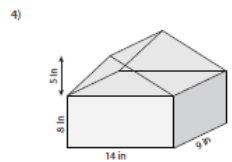
Volume = \_\_\_\_\_



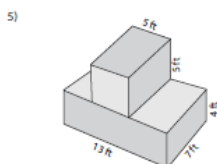
Volume = \_\_\_\_\_



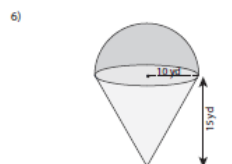
Volume = \_\_\_\_\_



Volume = \_\_\_\_\_



Volume = \_\_\_\_\_



Volume = \_\_\_\_\_