

Warm-Up  
 November 14, 2017

small

Big

front/back

x2

2

5

$A = bh$   
 $= 5 \times 2$   
 $= 10$   
 $\frac{x2}{20}$

sides

x2

3

5

$A = bh$   
 $= 3 \times 2$   
 $= 6$   
 $\frac{x2}{12}$

top/bottom

x2

3

5

$A = bh$   
 $= 5 \times 3$   
 $= 15$   
 $\frac{x2}{30}$

sides

x2

8

3

$A = bh$   
 $= 8 \times 3$   
 $= 24$   
 $\frac{x2}{48}$

front/back

x2

8

15

$A = bh$   
 $= 15 \times 8$   
 $= 120$   
 $\frac{x2}{240}$

top/bottom

x2

3

15

$A = bh$   
 $= 15 \times 3$   
 $= 45$   
 $\frac{x2}{90}$

Total 20 + 12 + 30 = 62 cm<sup>2</sup>

Total 240 + 48 + 90 = 378

62 + 378 = 440 total

Total - Overlap/Connections

440 - 12 = 428 cm<sup>2</sup>

3. B) small

(A)

| T/B                                                                                        | sides                                                                                      | F/B                                                                                        |
|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| $\begin{array}{ c } \hline \boxed{x2} \\ \hline \end{array} 2$                             | $\begin{array}{ c } \hline \boxed{x2} \\ \hline \end{array} 1$                             | $\begin{array}{ c } \hline \boxed{x2} \\ \hline \end{array} 1$                             |
| $A = bh$<br>$= 2 \times 2$<br>$= 4$<br>$\begin{array}{r} \times 2 \\ \hline 8 \end{array}$ | $A = bh$<br>$= 2 \times 1$<br>$= 2$<br>$\begin{array}{r} \times 2 \\ \hline 4 \end{array}$ | $A = bh$<br>$= 2 \times 1$<br>$= 2$<br>$\begin{array}{r} \times 2 \\ \hline 4 \end{array}$ |
| $8 + 4 + 4 = 16 \text{ cm}^2$                                                              |                                                                                            |                                                                                            |

Middle

| T/B                                                                                          | sides                                                                                       | F/B                                                                                         |
|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| $\begin{array}{ c } \hline \boxed{x2} \\ \hline \end{array} 3$                               | $\begin{array}{ c } \hline \boxed{x2} \\ \hline \end{array} 2$                              | $\begin{array}{ c } \hline \boxed{x2} \\ \hline \end{array} 2$                              |
| $A = bh$<br>$= 4 \times 3$<br>$= 12$<br>$\begin{array}{r} \times 2 \\ \hline 24 \end{array}$ | $A = bh$<br>$= 3 \times 2$<br>$= 6$<br>$\begin{array}{r} \times 2 \\ \hline 12 \end{array}$ | $A = bh$<br>$= 4 \times 2$<br>$= 8$<br>$\begin{array}{r} \times 2 \\ \hline 16 \end{array}$ |
| $24 + 12 + 16 = 52 \text{ cm}^2$                                                             |                                                                                             |                                                                                             |

Bottom

| T/B                                                                                          | sides                                                                                        | F/B                                                                                          |
|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| $\begin{array}{ c } \hline \boxed{x2} \\ \hline \end{array} 4$                               | $\begin{array}{ c } \hline \boxed{x2} \\ \hline \end{array} 3$                               | $\begin{array}{ c } \hline \boxed{x2} \\ \hline \end{array} 3$                               |
| $A = bh$<br>$= 6 \times 4$<br>$= 24$<br>$\begin{array}{r} \times 2 \\ \hline 48 \end{array}$ | $A = bh$<br>$= 4 \times 3$<br>$= 12$<br>$\begin{array}{r} \times 2 \\ \hline 24 \end{array}$ | $A = bh$<br>$= 6 \times 3$<br>$= 18$<br>$\begin{array}{r} \times 2 \\ \hline 36 \end{array}$ |

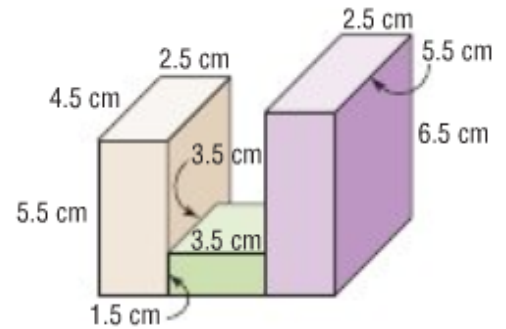
$$108 + 52 + 16 = 176 \text{ cm}^2$$

$$176 - 32 = 144 \text{ cm}^2$$

$$108 \text{ cm}^2$$

|                                                                                                                   |                                                                                                                    |                                                                                                                    |
|-------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| $\begin{array}{r} \overline{2.5} \\ A = bh \\ = 2.5 \times 5.5 \\ = 13.75 \\ \times 2 \\ \hline 27.5 \end{array}$ | $\begin{array}{r} \overline{4.5} \\ A = bh \\ = 4.5 \times 5.5 \\ = 24.75 \\ \times 2 \\ \hline 49.50 \end{array}$ | $\begin{array}{r} \overline{4.5} \\ A = bh \\ = 4.5 \times 2.5 \\ = 11.25 \\ \times 2 \\ \hline 22.50 \end{array}$ |
|-------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|

+ + + =



Middle  
F/B

$$\begin{array}{r} \overline{x2} \quad 1.5 \\ 3.5 \\ A = bh \\ = 3.5 \times 1.5 \\ = 5.25 \\ \times 2 \\ \hline 10.5 \end{array}$$

side

$$\begin{array}{r} \overline{x2} \quad 3.5 \\ 1.5 \\ A = bh \\ = 1.5 \times 3.5 \\ = 5.25 \\ \times 2 \\ \hline 10.5 \end{array}$$

T/B

$$\begin{array}{r} \overline{x2} \quad 3.5 \\ 3.5 \\ A = bh \\ = 3.5 \times 3.5 \\ = 12.25 \\ \times 2 \\ \hline 24.50 \end{array}$$

= 45.5

Right  
F/B

$$\begin{array}{r} \overline{x2} \quad 6.5 \\ 2.5 \\ A = bh \\ = 2.5 \times 6.5 \\ = 16.25 \\ \times 2 \\ \hline 32.5 \end{array}$$

side

$$\begin{array}{r} \overline{x2} \quad 5.5 \\ 6.5 \\ A = bh \\ = 6.5 \times 5.5 \\ = 35.75 \\ \times 2 \\ \hline 71.5 \end{array}$$

T/B

$$\begin{array}{r} \overline{x2} \quad 5.5 \\ 2.5 \\ A = bh \\ = 2.5 \times 5.5 \\ = 13.75 \\ \times 2 \\ \hline 27.5 \end{array}$$

Total - faces loss  
276.5 - 10.5 - 10.5

255.5 cm<sup>2</sup>

Page 31 #8 b, c  
 $144\text{cm}^2$   $\leftarrow$   $255.5\text{cm}^2$   
 Homework.... Worksheet

1.  $2800\text{cm}^2$

2.  $14750\text{cm}^2$

3.

4.  $1796\text{cm}^2$

#5. 9200  
 No floor  
 or  
 9050  
 [No door]

