

*We want to build the box! That's surface area!

NOTES 6-5
Surface Area

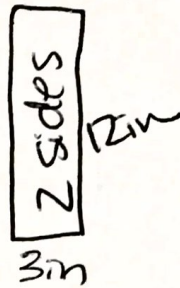
Int 1

Unit 6



$$10 \cdot 12 = 120 \cdot 2 = \boxed{240}$$

F & B



$$3 \cdot 12 = 36 \cdot 2 = \boxed{72}$$

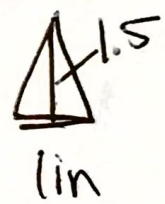
2 sides



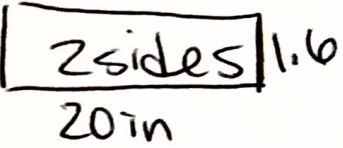
$$3 \cdot 10 = 30 \cdot 2 = \boxed{60}$$

T & B

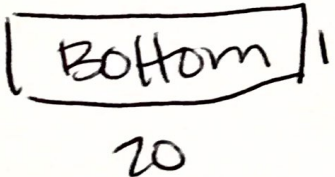
$$\boxed{SA = 372 \text{ in}^2}$$



$$\frac{1 \cdot 1.5}{2} = .75$$



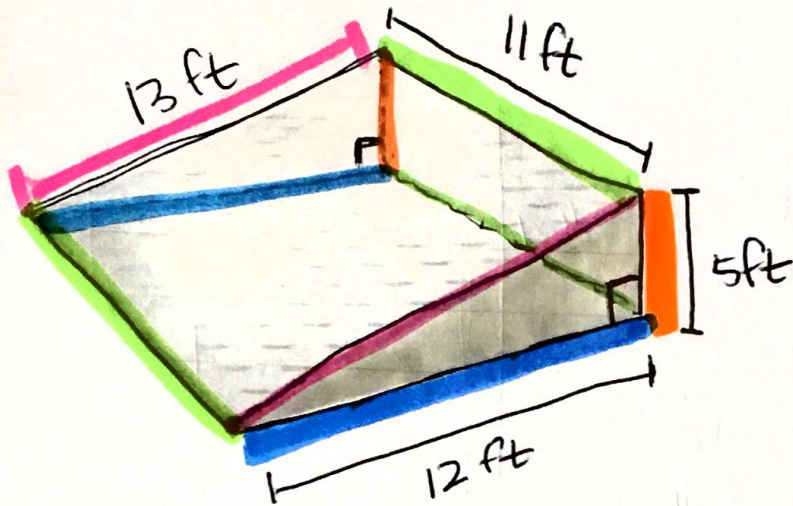
$$20 \cdot 1.6 = 32 \cdot 2 = \boxed{64}$$



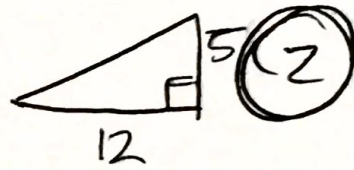
$$20 \cdot 1 = \boxed{20}$$

$$\begin{array}{r} 64 \\ 20 \\ + 1.5 \\ \hline \end{array}$$

$$\boxed{SA = 85.5 \text{ in}^2}$$



$$\begin{array}{|c|} \hline 11 \\ \hline \text{Back} \\ \hline \end{array} \cdot 5 = 11 \cdot 5 = \boxed{55}$$



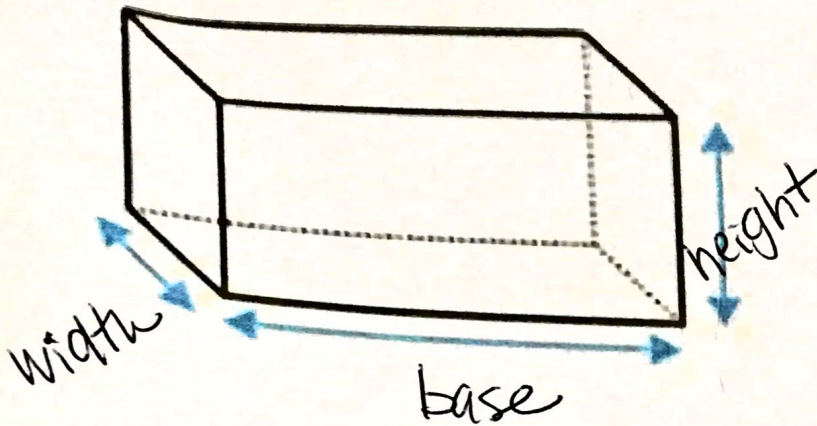
$$\frac{12 \cdot 5}{2} = \boxed{30} \cdot 2 = \boxed{60}$$

2Δ

$$\begin{array}{|c|} \hline \text{Bottom} \\ \hline \end{array} \begin{array}{|c|} \hline 11 \\ \hline \end{array} \cdot 12 = \boxed{132}$$

$$\begin{array}{|c|} \hline \text{Top} \\ \hline \end{array} \begin{array}{|c|} \hline 13 \\ \hline \end{array} \cdot 11 = \boxed{143}$$

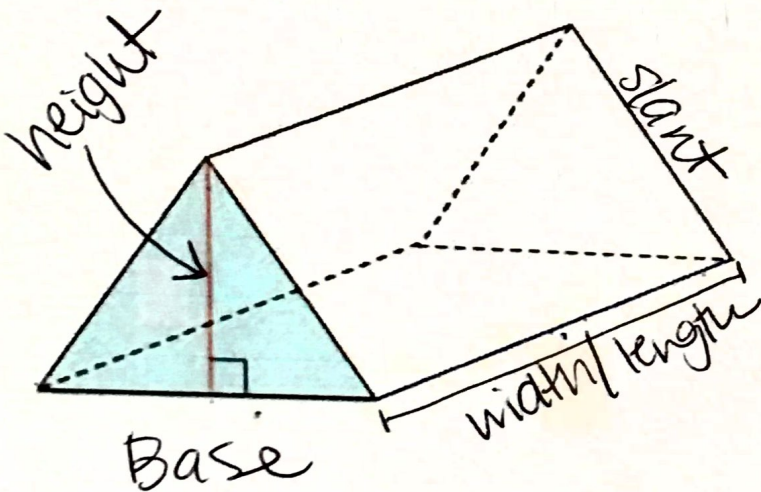
Add it up = $\boxed{390 \text{ ft}^2 = \text{SA}}$



Rectangular
Prism

Top/Bottom
side/side
Front/Back

6 total faces!



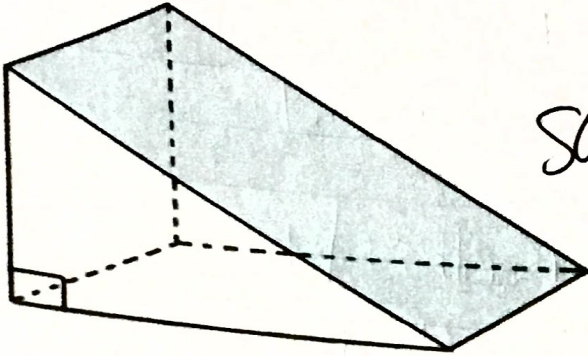
Triangular Prism

3 rectangles

↳ could be the same
could be different.

2 Triangles

5 total faces!



same!