

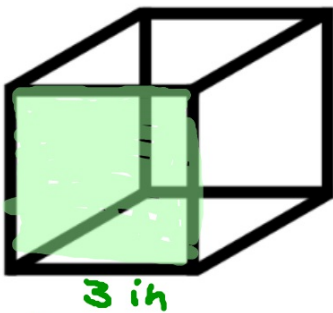
April 23, 2012^{m7R}
Anything to correct?



**“Keep it down. Don’t make
me come in there.”**

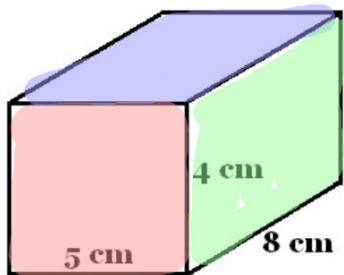
4/23 - Surface Area

Surface area is the total # of squares on all of the faces added up.
Label is units squared.



Find the surface area of this cube with 3 in sides.

$$\begin{aligned} & \square \times 6 = 9 \times 6 \\ & A = LW = 54 \text{ in}^2 \\ & = 3 \cdot 3 \\ & = 9 \end{aligned}$$



Find the surface area of the rectangular prism.

$$\begin{aligned} & \text{Red face: } 5\text{ cm} \times 4\text{ cm} \\ & A \times 2 \\ & = 20\text{ cm}^2 \times 2 \end{aligned}$$

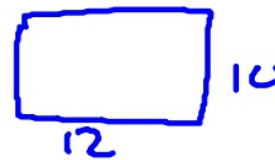
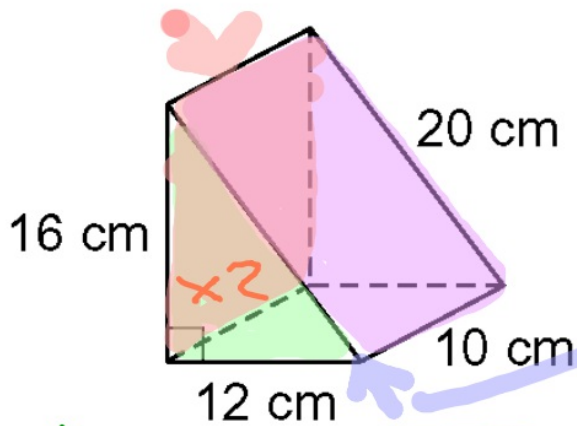
$$\begin{aligned} & \text{Blue face: } 5\text{ cm} \times 8\text{ cm} \\ & A \times 2 \\ & = 40\text{ cm}^2 \times 2 \end{aligned}$$

$$\begin{aligned} & \text{Green face: } 8\text{ cm} \times 4\text{ cm} \\ & A \times 2 \\ & = 32\text{ cm}^2 \times 2 \end{aligned}$$

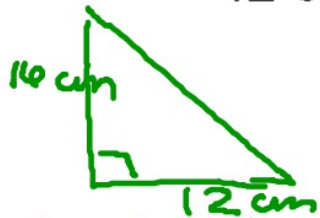
$$= 40\text{ cm}^2 + 80\text{ cm}^2 + 64\text{ cm}^2$$

$$= 184\text{ cm}^2$$

Find the surface area of this triangular prism.

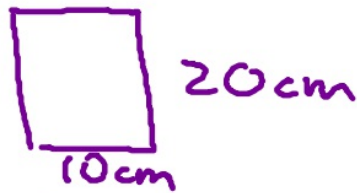


$$\begin{aligned} A &= LW \\ &= 12 \cdot 10 \\ &= 120 \text{ cm}^2 \end{aligned}$$

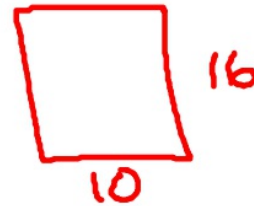


$$\begin{aligned} A &= \frac{1}{2}bh \\ &= \frac{1}{2} \cdot 12 \cdot 16 \\ &= 96 \text{ cm}^2 \end{aligned}$$

$$96 \text{ cm}^2$$



$$\begin{aligned} A &= LW \\ &= 10 \cdot 20 \\ &= 200 \text{ cm}^2 \end{aligned}$$



$$\begin{aligned} A &= LW \\ &= 10 \cdot 16 \\ &= 160 \text{ cm}^2 \end{aligned}$$

$$120 \text{ cm}^2$$

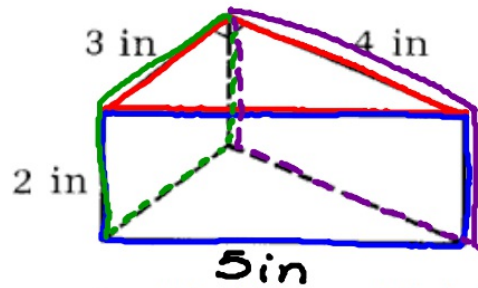
$$160 \text{ cm}^2$$

$$200 \text{ cm}^2$$

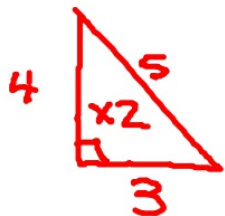
$$96 \text{ cm}^2$$

$$96 \text{ cm}^2$$

$$672 \text{ cm}^2$$



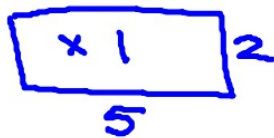
This figure represents a slab of cheese. It is in the form of a right triangular prism. Find the least amount of wrapping needed to cover the cheese on all sides.



$$A = \frac{1}{2}bh$$

$$= \frac{1}{2} \cdot 3 \cdot 4$$

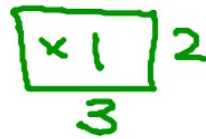
$$= 6$$



$$A = LW$$

$$= 5 \cdot 2$$

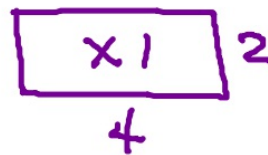
$$= 10$$



$$A = LW$$

$$= 3 \cdot 2$$

$$= 6$$



$$A = LW$$

$$= 4 \cdot 2$$

$$= 8$$

$$\begin{array}{r}
 6 \\
 10 \\
 6 \\
 8 \\
 \hline
 30
 \end{array}$$

30 in²

Homework

Pink **3D-figures WS3**

Due