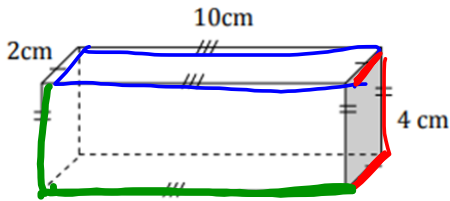


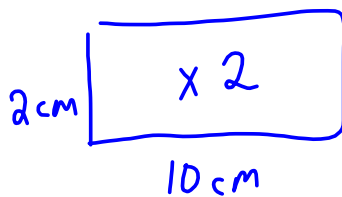
November 14, 2019

Warm-Up

Ex 1: Find the surface area.

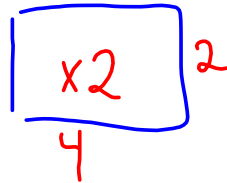


Top/Bottom



$$\begin{aligned}
 A &= bh \leftarrow \\
 &= (10)(2) \\
 &= 20 \leftarrow \\
 &\quad \times 2 \\
 &\hline
 &40 \text{ cm}^2
 \end{aligned}$$

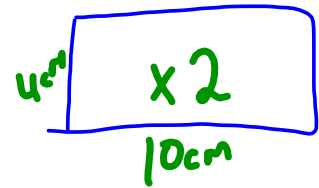
Sides



$$\begin{aligned}
 A &= bh \\
 &= 4 \times 2 \\
 &= 8
 \end{aligned}$$

$$\begin{aligned}
 &\quad \times 2 \\
 &\hline
 &16 \text{ cm}^2
 \end{aligned}$$

Front/Back



$$\begin{aligned}
 A &= bh \\
 &= 10 \times 4 \\
 &= 40 \\
 &\quad \times 2 \\
 &\hline
 &80 \text{ cm}^2
 \end{aligned}$$

+ 16 cm² +

$$\boxed{136 \text{ cm}^2}$$

Number of Cubes	Surface Area (square units) u^2
1	6
2	10
3	14
4	18
5	22

Surface area of "1"

cube

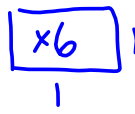
$$A = bh$$

$$= 1 \times 1$$

$$= 1$$

x 6 faces

6 units²



***Each connection gives a loss of two faces ***

Find the surface area.



of cubes \times surface area of 1 cube

$$4 \times 6$$

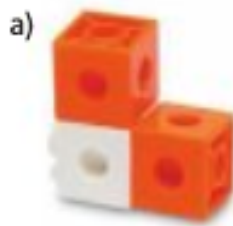
$$TSA = 24 u^2$$

\swarrow 3 connections

Total Surface area - # faces lost
[TSA]

$$24 - 6$$

$$18 u^2$$



① TSA = #cubes x SA of one

$$3 \times 6$$

$$18u^2$$

② TSA - #faces lost

$$18 - 4$$

$$14u^2$$

← 2 connections

① TSA = #cubes x SA of one

$$4 \times 6$$

$$24u^2$$

② TSA - #faces lost

$$24 - 6$$

$$18u^2$$

← 3 connections

pg 470 question #4 c,d,e,f



TSA = # cubes x SA of 1

TSA - faces lost

① TSA = # cubes x SA of 1

② TSA - faces lost