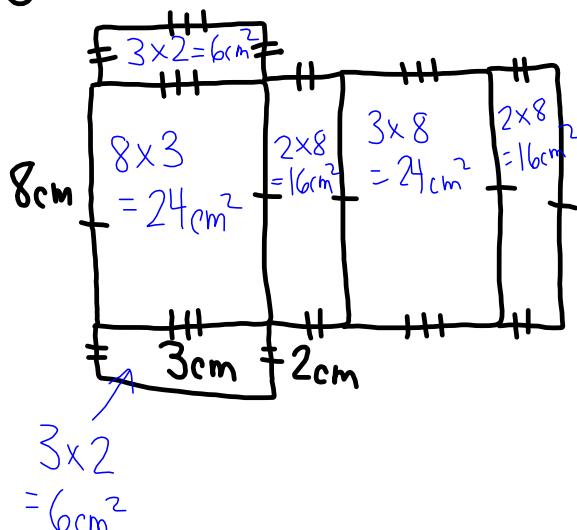


$$\begin{aligned} T.S.A &= 15 + 15 + 27 + 27 + 45 + 45 \\ &= 174 \text{ cm}^2 \end{aligned}$$

#5.

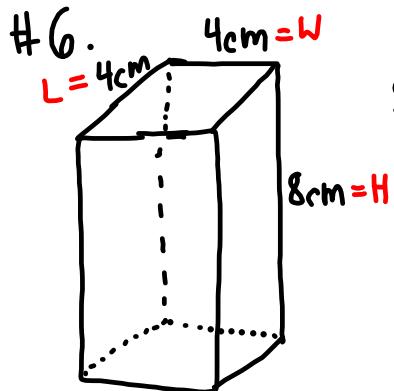


Step 1: find area of each rectangle

$$A_{\text{rectangle}} = b \times h$$

Step 2: find the sum of all the areas.

$$\begin{aligned} T.S.A &= 6 + 6 + 24 + 24 + 16 + 16 \\ &= 92 \text{ cm}^2 \end{aligned}$$



$$\begin{aligned}
 S.A_{R.P.} &= [2 \times L \times W] + [2 \times L \times H] + [2 \times W \times H] \\
 &= [2 \times 4 \times 4] + [2 \times 4 \times 8] + [2 \times 4 \times 8] \\
 &= 32 + 64 + 64 \\
 &= 160 \text{ cm}^2
 \end{aligned}$$

L  
W  
H  
4cm, 4cm, 8cm

b)  $S.A_{\text{cube}} = 6 (\text{side length}^2)$

↑                      ↑  
Cube made          Area of one square face  
of 6 identical      faces.

$$\begin{aligned}
 &= 6 (6^2) \\
 &= 6(36) \\
 &= 216 \text{ cm}^2
 \end{aligned}$$

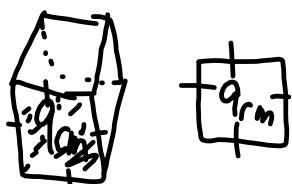
7 a) 4m by 3m by 10m

$$\begin{aligned}
 S.A_{R.P.} &= [2 \times L \times W] + [2 \times L \times H] + [2 \times W \times H] \\
 &= [2 \times 4 \times 3] + [2 \times 4 \times 10] + [2 \times 3 \times 10] \\
 &= 24 + 80 + 60 \\
 &= 164 \text{ m}^2
 \end{aligned}$$

10 a)  $S.A_{\text{cube}} = 6 (\text{side length}^2)$

$$54 = 6 (x^2)$$

a) Area of one face =  $54 \div 6$   
 $= 9$



b) Side length =  $\sqrt{\text{Area}}$

$$\begin{aligned}
 &= \sqrt{9} \\
 &= 3 \text{ cm}
 \end{aligned}$$