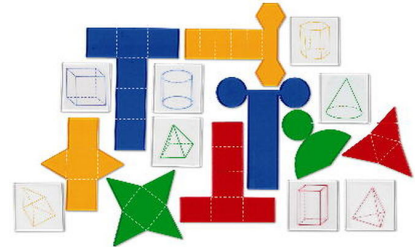


### Warm Up Grade 8



### Assessment Review

1. Maribeth works in a dog rescue centre. At feeding time, 5 of the dogs get  $\frac{3}{4}$  kg of food and 3 dogs get  $\frac{3}{5}$  kg of food. How much food does Maribeth feed to the dogs?

$$\frac{5}{1} \times \frac{3}{4} = \frac{15}{4}$$

$$\frac{3}{1} \times \frac{3}{5} = \frac{9}{5}$$

$$\frac{15}{4} + \frac{9}{5} = \frac{75}{20} + \frac{36}{20} = \frac{111}{20} = 5 \frac{11}{20} \text{ kg}$$

2. Use mental math.

a) 25% of 16

$\frac{1}{4}$  of 16  
 like  $16 \div 4$   
 4

b)  $700 - 249$

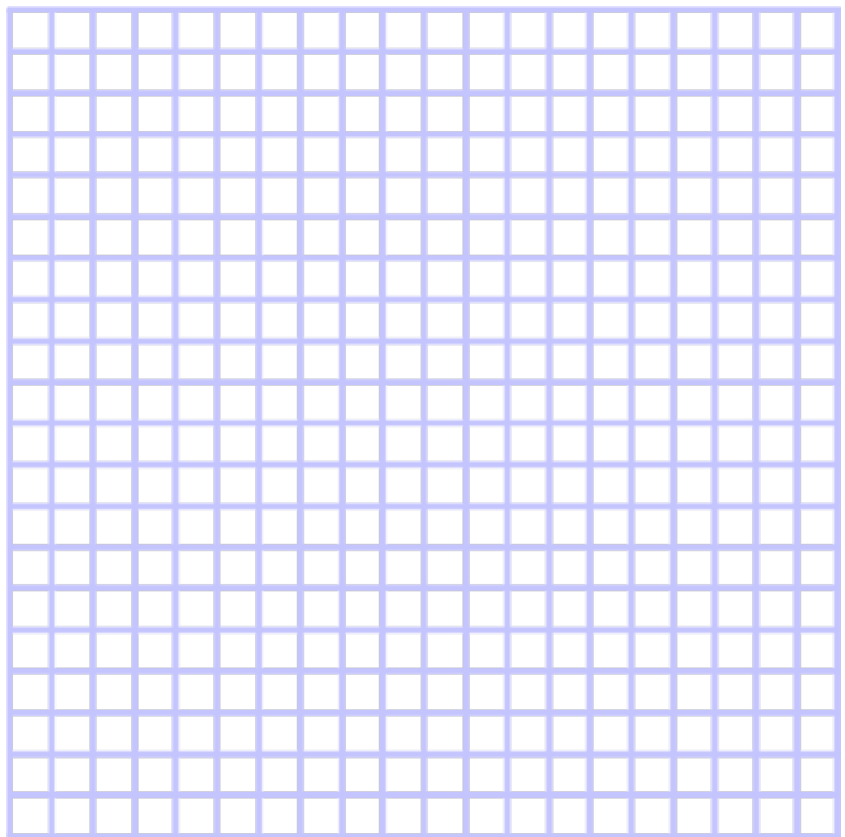
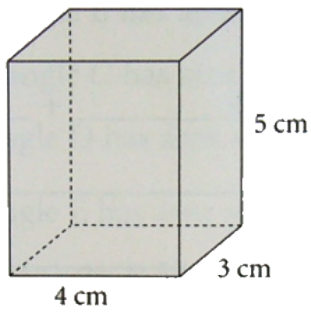
$$700 - 200 = 500$$

$$\begin{array}{r} 500 \\ - 50 \\ \hline 450 \\ + 1 \\ \hline 451 \end{array}$$

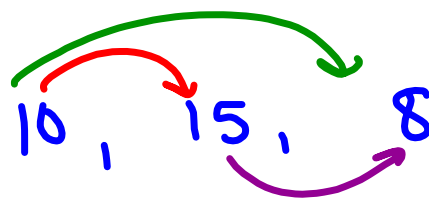
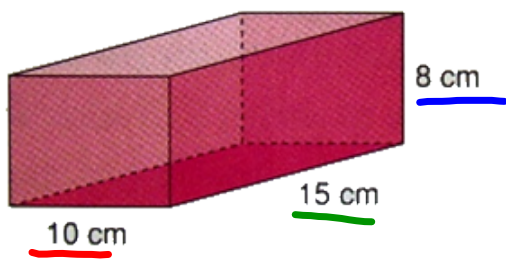
$$\begin{array}{r} 69 \\ \cancel{700} \\ - 249 \\ \hline \end{array}$$

$$\begin{array}{r} 69 \\ \cancel{700} \\ - 249 \\ \hline 451 \end{array}$$

What is the surface area of this prism?



Sketch a net of this right rectangular prism.  
 What is its surface area?



$$A = L \times w$$

$$10 \times 15$$

$$= 150$$

$$\underline{\times 2 \text{ Top/Back}}$$

$$300$$

$$A = L \times w$$

$$10 \times 8$$

$$= 80$$

$$\underline{\times 2 \text{ L/R}}$$

$$+ 160$$

$$700 \text{ cm}^2$$

$$A = L \times w$$

$$15 \times 8$$

$$= 120$$

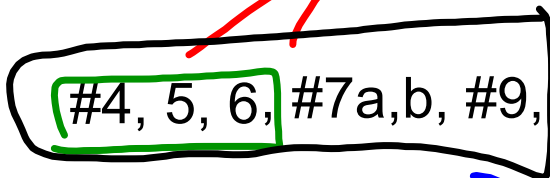
$$\underline{\times 2 \text{ Front/Back}}$$

$$240$$

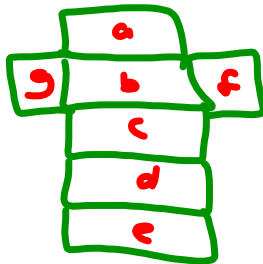
# Class/Homework

5) 8, 2, 3

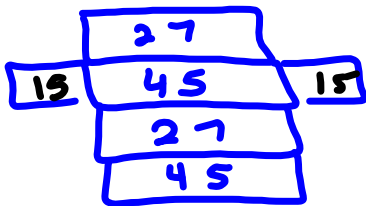
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4)

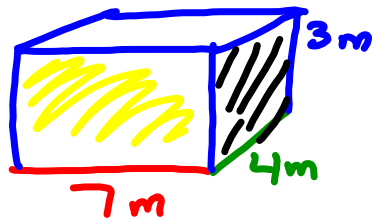


add up all areas

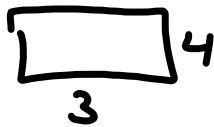


$$27 + 45 + 27 + 45 + 15 + 15$$

9) Paint a room  
 $L$  by  $W$  by  $H$   
 7m by 4m by 3m



Don't paint  
 floor  
 7m by 4m



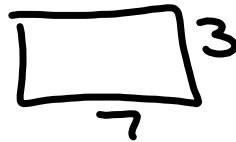
$$A = L \times W$$

$$3 \times 4$$

$$= 12$$

$$\underline{\times 2}$$

$$24 \text{ m}^2$$



$$A = L \times W$$

$$7 \times 3$$

$$21$$

$$\underline{\times 2}$$

$$42 \text{ m}^2$$

$$+ \quad =$$

Area of walls

$$66 \text{ m}^2$$

$$\underline{\times 2 \text{ coats of paint}}$$

$$132 \text{ m}^2$$

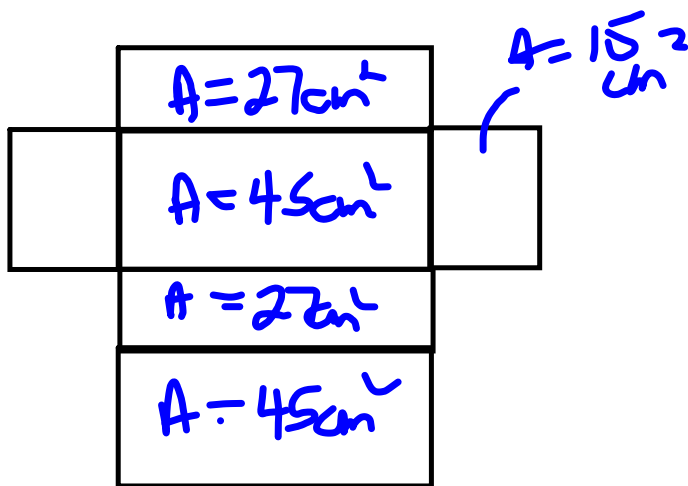
$40 \text{ m}^2$  is covered by 1 can

$$132 \text{ m}^2 \div 40 \text{ m}^2 = 3.3 \text{ cans}$$

buy 4 cans

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4.

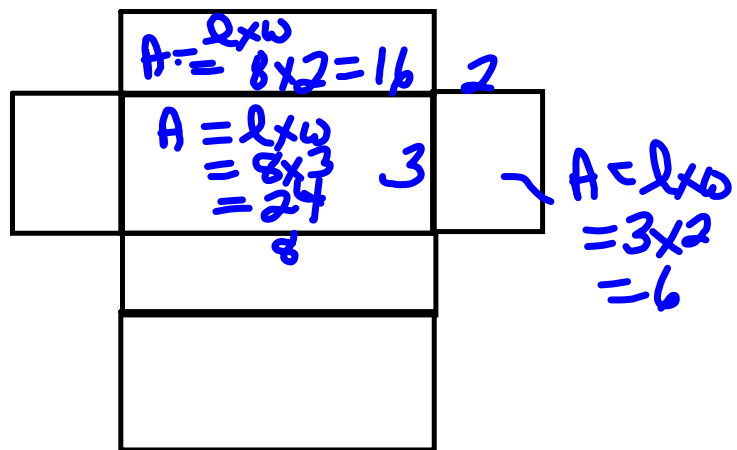
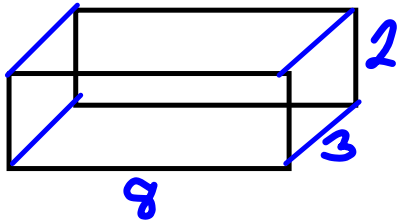


$$\begin{aligned} SA &= 2 \times 15 + 2 \times 45 + 2 \times 27 \\ &= 30 + 90 + 54 \\ &= 174 \text{ cm}^2 \end{aligned}$$

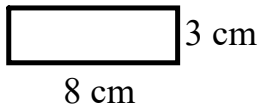
I added all  
the areas.

$$\begin{aligned} SA &= 15 + 27 + 45 + 15 + 27 + 45 \\ &= 174 \text{ cm}^2 \end{aligned}$$

5.



top/bottom

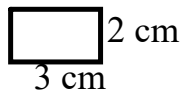


$$A = l \times w$$

$$= 8 \text{ cm} \times 3 \text{ cm}$$

$$= 24 \text{ cm}^2$$

side/side

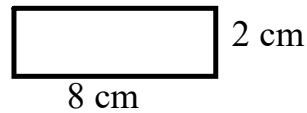


$$A = l \times w$$

$$= 2 \text{ cm} \times 3 \text{ cm}$$

$$= 6 \text{ cm}^2$$

front/back



$$A = l \times w$$

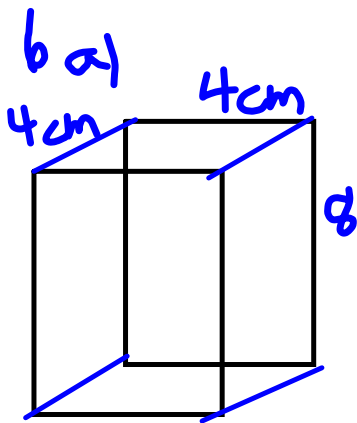
$$= 2 \text{ cm} \times 8 \text{ cm}$$

$$= 16 \text{ cm}^2$$

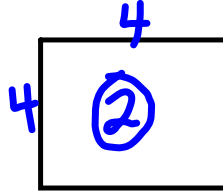
$$SA = 2 \times 16 + 2 \times 24 + 2 \times 6$$

$$= 32 + 48 + 12$$

$$= 92 \text{ cm}^2$$

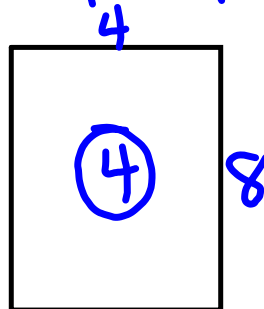


Top and Bottom



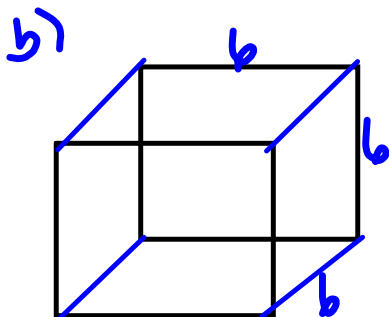
$$A = l \times w \\ = 4 \times 4 \\ = 16 \text{ cm}^2$$

Front, Back, Sides

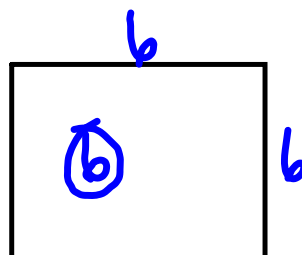


$$A = l \times w \\ = 8 \times 4 \\ = 32 \text{ cm}^2$$

$$SA = 2 \times 16 + 4 \times 32 \\ = 32 + 128 \\ = 160 \text{ cm}^2$$



Cube - All faces the same



$$A = l \times w \\ = b \times b \\ = 36 \text{ cm}^2$$

$$SA = 6 \times 36 \\ = 216 \text{ cm}^2$$





## Attachments

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Review of Surface area of 2D Shape Grade 8 Unit 4 PDF.pdf