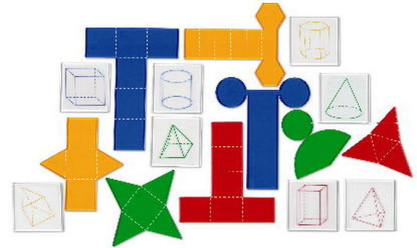


Warm Up Grade 8



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?

$$\frac{5}{1} \times \frac{3}{4} = \frac{15}{4} \quad \left. \vphantom{\frac{5}{1} \times \frac{3}{4}} \right\} \quad \frac{3}{1} \times \frac{3}{5} = \frac{9}{5}$$

$$5 \times \frac{15}{4} + \frac{9 \times 4}{5 \times 4}$$

$$\frac{75}{20} + \frac{36}{20}$$

$$\frac{111}{20} = \boxed{5 \frac{11}{20}}$$

Marybeth
feeds the dogs
 $5 \frac{11}{20}$ kg of
food.

2. Use mental math.

a) 25% of 16 = $\boxed{4}$

↓
like ÷ by 4

b) $700 - 249$

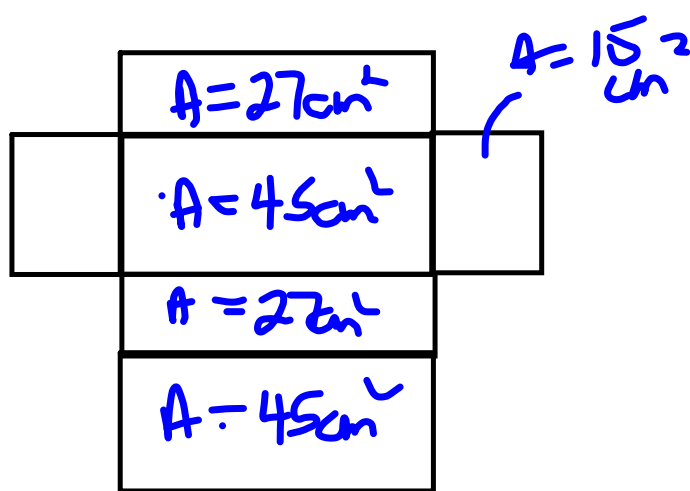
$$700 - 200 = 500$$

$$\begin{array}{r} 500 \\ - 49 \\ \hline \end{array}$$

$$\boxed{451}$$

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4.

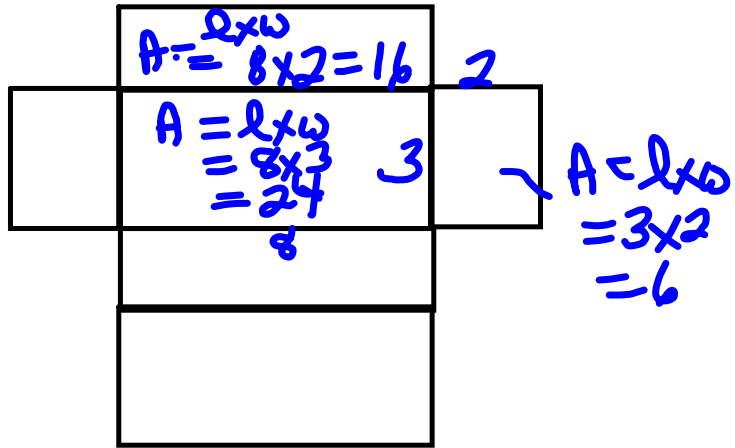
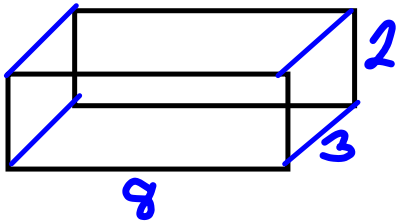


$$\begin{aligned} SA &= 2 \times 15 + 2 \times 45 + 2 \times 27 \\ &= 30 + 90 + 54 \\ &= 174 \text{ cm}^2 \end{aligned}$$

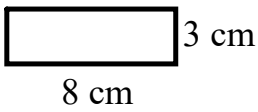
I added all
the areas.

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

5.



top/bottom



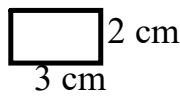
$$A = l \times w$$

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

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

$$\begin{array}{r} \times 2 \\ \hline 48 \text{ cm}^2 \end{array} \quad +$$

side/side



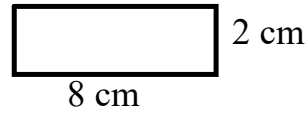
$$A = l \times w$$

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

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

$$\begin{array}{r} \times 2 \\ \hline 12 \text{ cm}^2 \end{array} \quad +$$

front/back



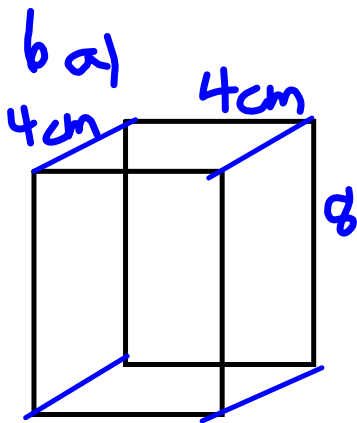
$$A = l \times w$$

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

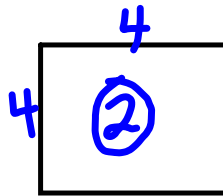
$$= 16 \text{ cm}^2$$

$$\begin{array}{r} \times 2 \\ \hline 32 \text{ cm}^2 \end{array}$$

$$392 \text{ cm}^2$$

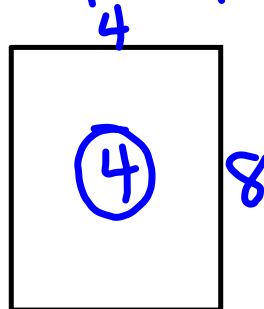


Top and Bottom



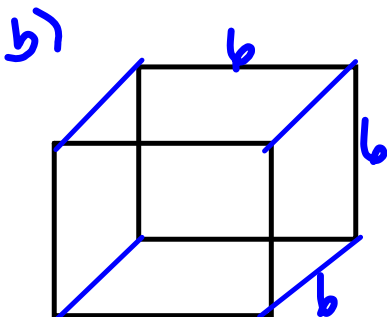
$$A = l \times w \\ = 4 \times 4 \\ = 16 \text{ cm}^2$$

Front, Back, Sides

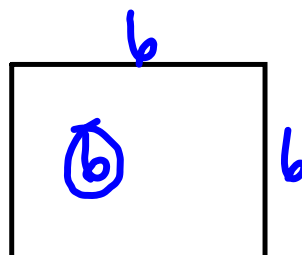


$$A = l \times w \\ = 8 \times 4 \\ = 32 \text{ cm}^2$$

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



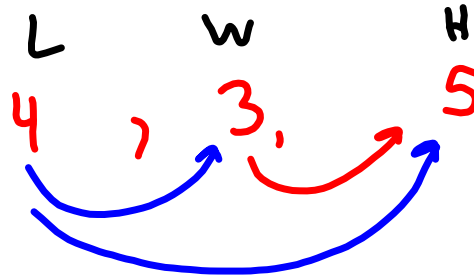
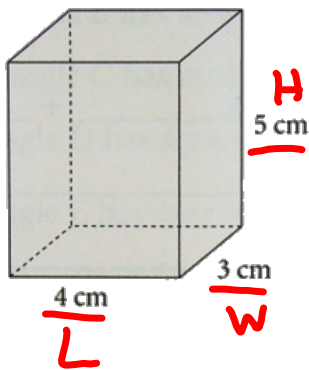
Cube - All faces the same



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

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

What is the surface area of this prism?



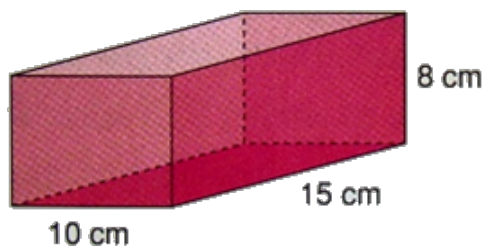
$$\begin{array}{l}
 \text{3cm} \\
 \square \\
 \text{4cm} \\
 A_{\square} = L \times W \\
 = 4\text{cm} \times 3\text{cm} \\
 = 12\text{cm}^2 \\
 \times 2 \\
 \hline
 \end{array}$$

$$\begin{array}{l}
 \text{5cm} \\
 \square \\
 \text{4cm} \\
 A = L \times W \\
 = 4\text{cm} \times 5\text{cm} \\
 = 20\text{cm}^2 \\
 \times 2 \\
 \hline
 40\text{cm}^2
 \end{array}$$

$$\begin{array}{l}
 \text{5cm} \\
 \square \\
 \text{3cm} \\
 A_{\square} = L \times W \\
 = 3\text{cm} \times 5\text{cm} \\
 = 15\text{cm}^2 \\
 \times 2 \\
 \hline
 30\text{cm}^2
 \end{array}$$

$$\begin{array}{l}
 \text{Total SA} = 24\text{cm}^2 + 40\text{cm}^2 + 30\text{cm}^2 \\
 = 94\text{cm}^2
 \end{array}$$

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

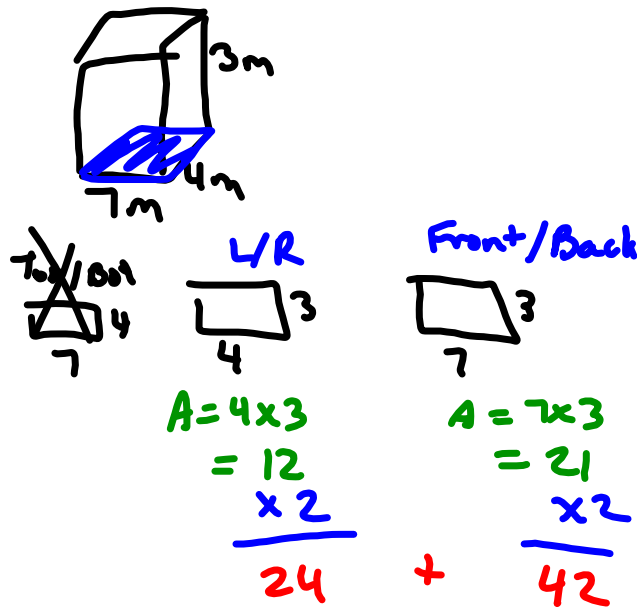


Class/Homework

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#6c, #7a,b, #9, #10, #11, #12, #13

Cube has 6 equal face
 Total SA $\div 6$
 \Rightarrow Area of 1 face
 \Rightarrow Side = $\sqrt{\text{Area}}$



Total SA = 66 m^2

$\times 2$ coats of paint

 132 m^2

1 can = 40 m^2

$132 \text{ m}^2 \div 40 \text{ m}^2 = 3.3 \text{ cans}$
 buy 4 cans

Attachments

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