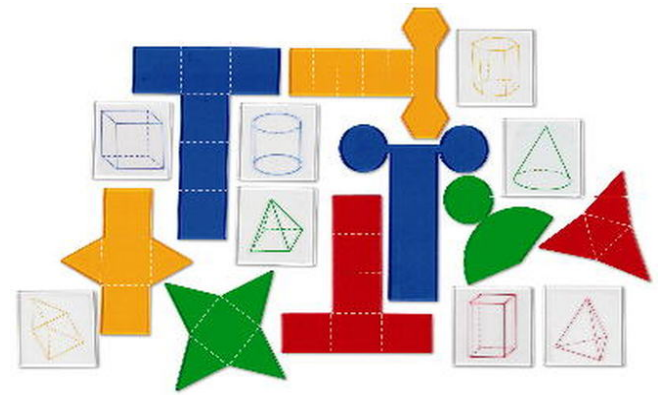
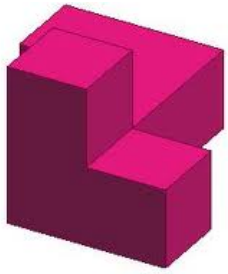


## Warm Up Grade 8



### 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?

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

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

$$\frac{5}{5} \times \frac{15}{4} + \frac{9}{5} \times \frac{4}{4}$$
$$\frac{75}{20} + \frac{36}{20}$$

$$= \frac{111}{20} = 5 \frac{11}{20} \text{ kg}$$

2. Use mental math.

a) 25% of 16

$$= \boxed{4}$$

↓  
like ÷ by 4

$$16 \div 4$$
$$= 4$$

b) 700 - 249

$$= 451$$

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

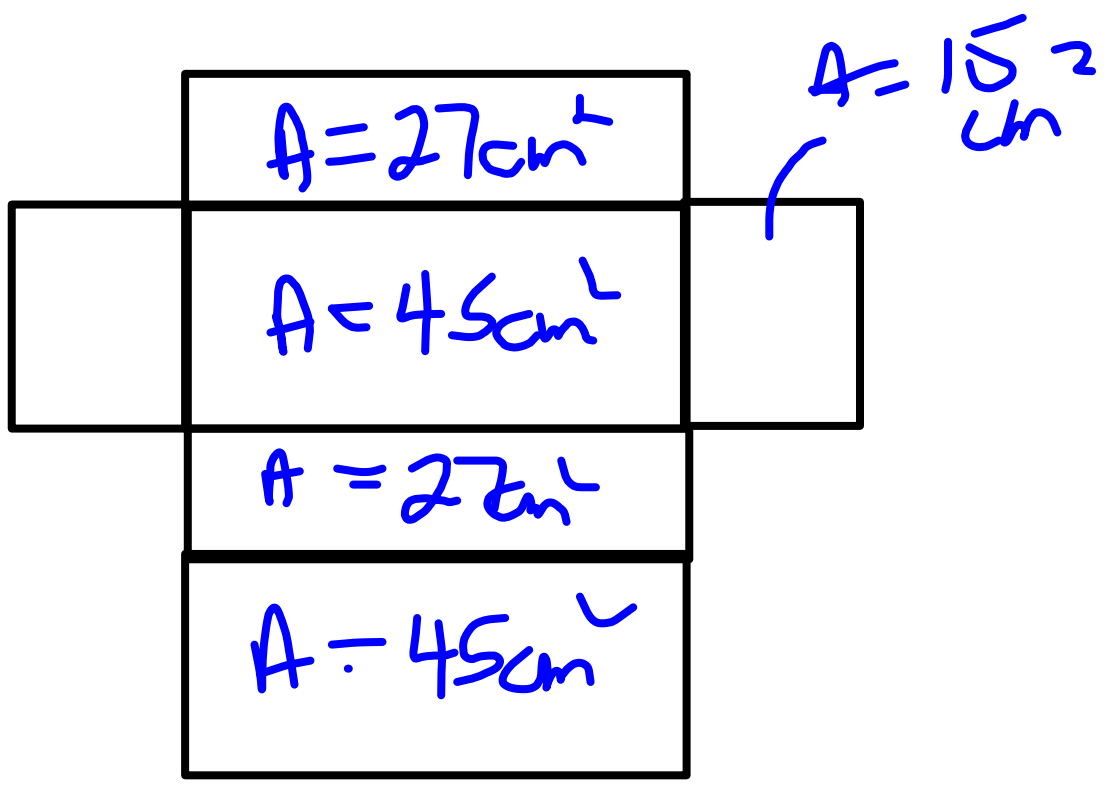
$$700 - 200 = 500$$

$$500 - 40 = 460$$

$$\begin{array}{r} -9 \\ 460 \\ \hline 451 \end{array}$$

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4.

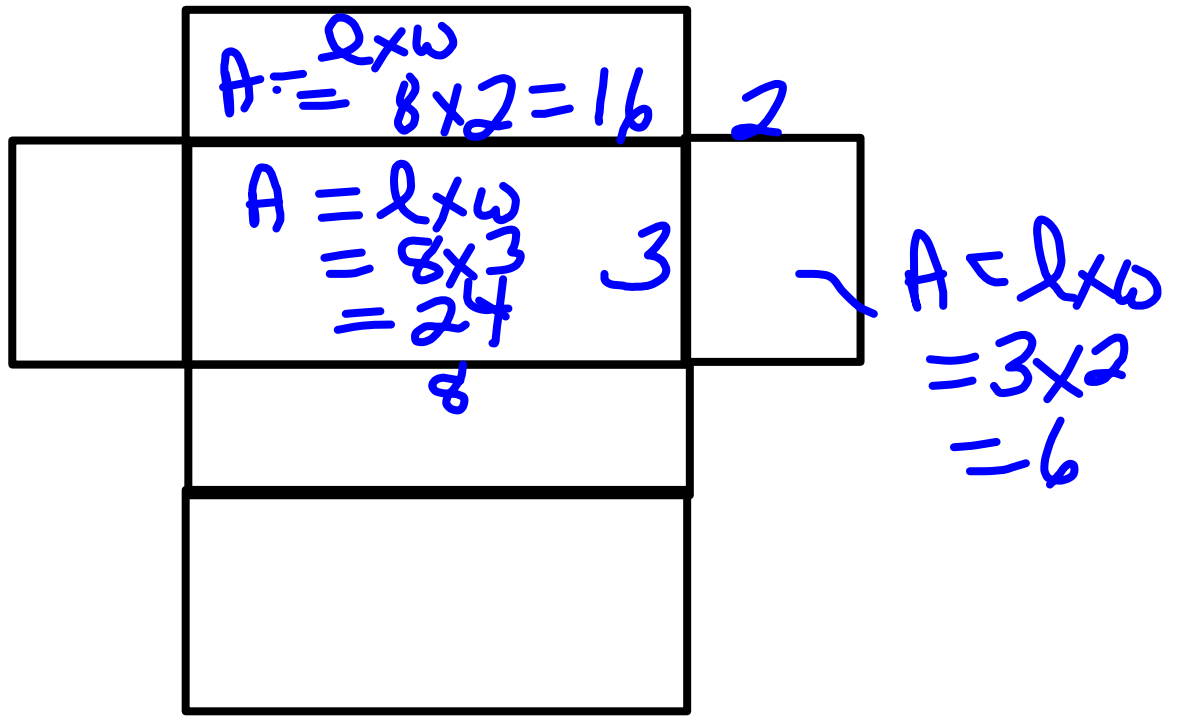
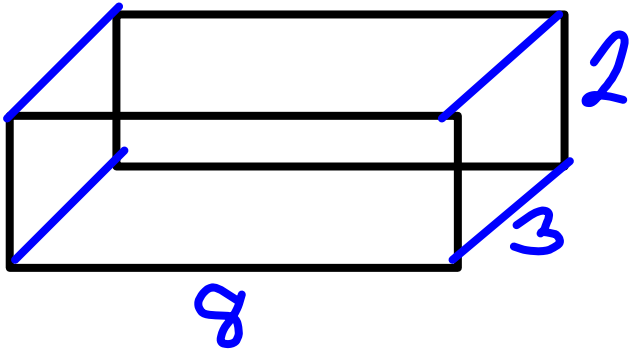


$$\begin{aligned} SA &= 2 \times 15 + 2 \times 45 + 2 \times 27 \\ &= 30 + 90 + 54 \\ &= 174 \text{ cm}^2 \end{aligned}$$

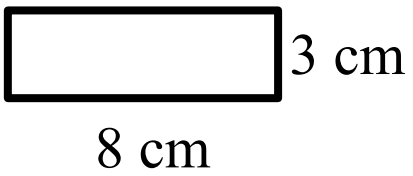
I added all the areas.

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

5.



top/bottom

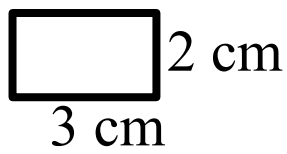


$$A = l \times w$$

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

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

side/side

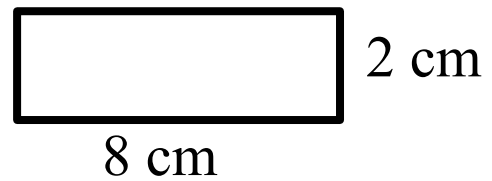


$$A = l \times w$$

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

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

front/back

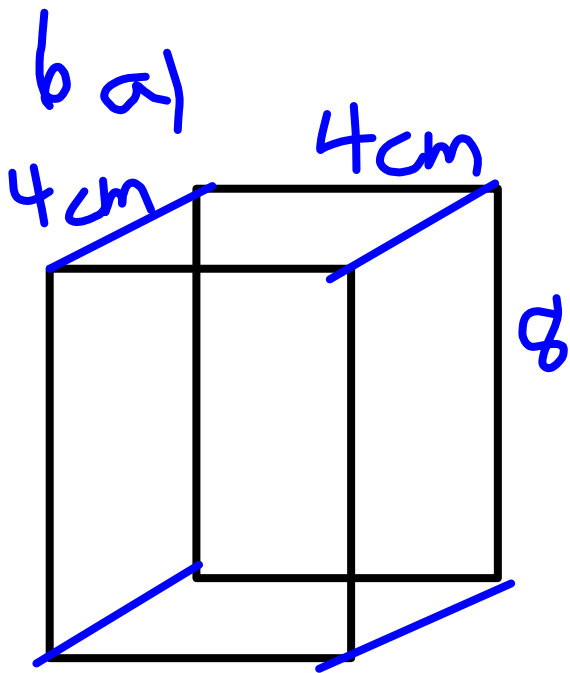


$$A = l \times w$$

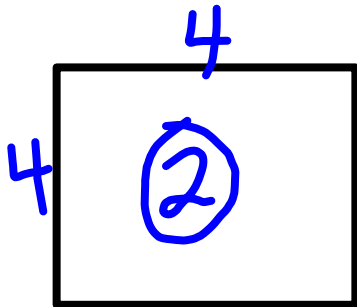
$$= 2 \text{ cm} \times 8 \text{ cm}$$

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

$$\begin{aligned}
 SA &= 2 \times 16 + 2 \times 24 + 2 \times 6 \\
 &= 32 + 48 + 12 \\
 &= 92 \text{ cm}^2
 \end{aligned}$$

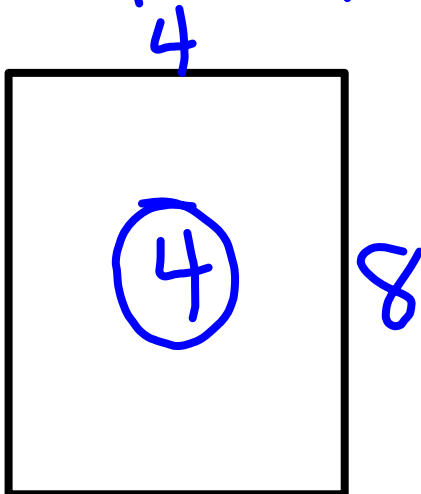


Top and Bottom



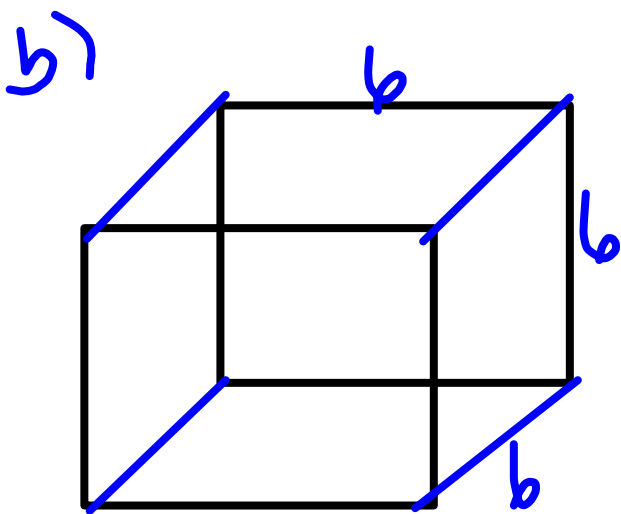
$$A = l \times w \\ = 4 \times 4 \\ = 16 \text{ cm}^2$$

Front, Back, Sides

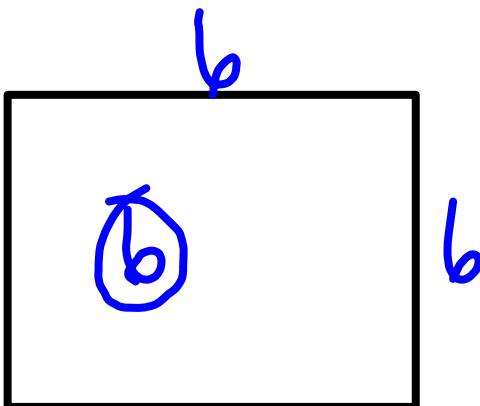


$$A = l \times w \\ = 8 \times 4 \\ = 32 \text{ cm}^2$$

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



Cube - All faces the same



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

$$SA = 6 \times 3b \\ = 216 \text{ cm}^2$$

a) This room has dimensions of 14ft by 12ft by 8ft. If a painter wants to put 2 coats of paint on the walls, what is the total surface area of paint needed? (not paint the ceiling or floor)

**Walls**

*L/R*

$A = L \times W$   
 $= 8 \text{ ft} \times 12 \text{ ft}$   
 $= 96 \text{ ft}^2$   
 $\times 2$   


---

 $192 \text{ ft}^2$

*Fr/Back*

$A = L \times W$   
 $= 14 \text{ ft} \times 8 \text{ ft}$   
 $= 112 \text{ ft}^2$   
 $\times 2$   


---

 $224 \text{ ft}^2$

$L \times W \times L$

$\text{---} / \text{---} |$

$= 416 \text{ ft}^2$   
 $\times 2 \text{ coats}$   


---

 $832 \text{ ft}^2$

b) If one can of paint can cover 600ft<sup>2</sup>, then how many cans does the painter need to buy?

$832 \text{ ft}^2 \div 600 \text{ ft}^2$   
 $= 1.39 \text{ cans} \rightarrow \text{Buy 2 cans}$

# Class/Homework

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