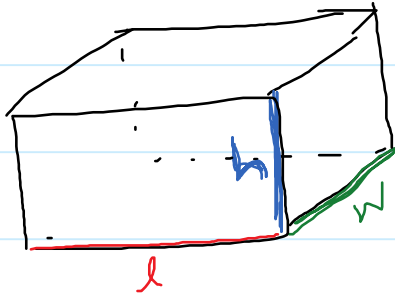


# 1.3 Surface Areas of Objects made from Right Rectangular Prisms

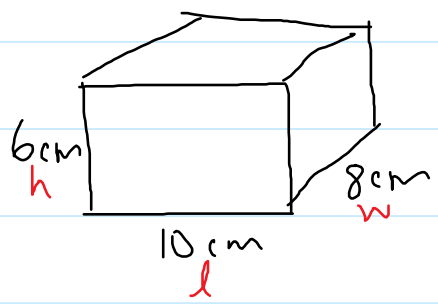
February 17, 2015 9:33 AM



$$SA = 2lw + 2lh + 2wh$$
$$= 2(lw + lh + wh)$$

the sum of the areas of its 6 rectangular faces

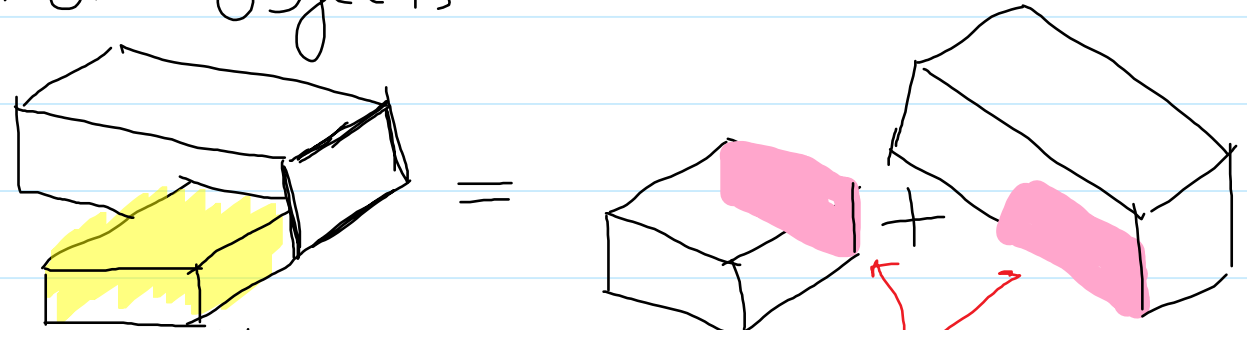
ex. #1

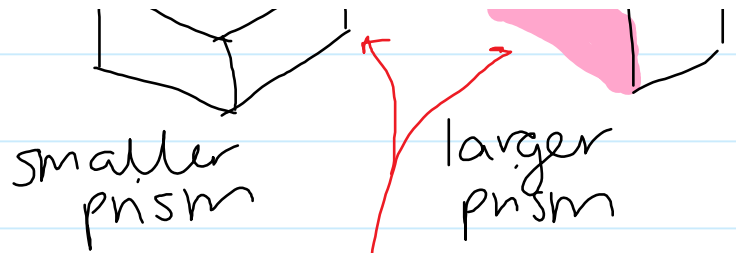
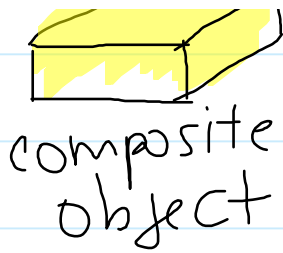


$$SA = 2(lw + lh + wh)$$
$$= 2(10 \cdot 8 + 10 \cdot 6 + 8 \cdot 6)$$
$$= 2(80 + 60 + 48)$$
$$= 376 \text{ cm}^2$$

DON'T FORGET UNITS!!!

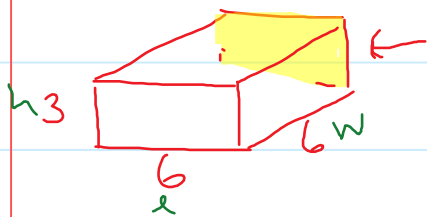
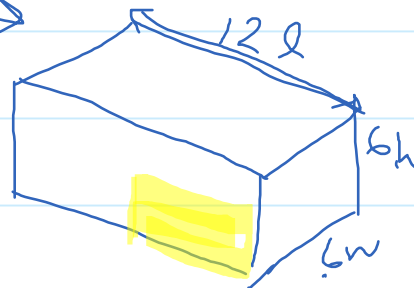
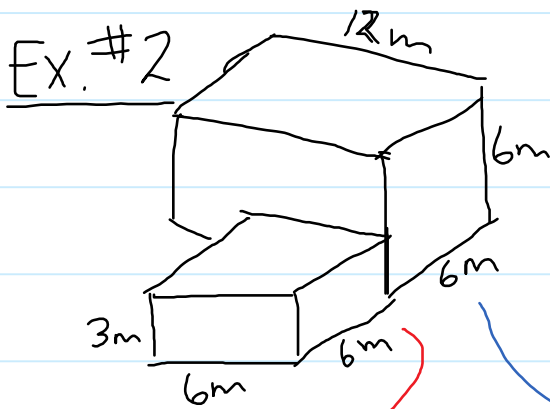
A composite object is made of 2 or more objects





sides that overlap

# not part of the surface area



$$\begin{aligned}
 SA &= 2lw + 2lh + 2wh \\
 &= 2 \cdot 6 \cdot 6 + 2 \cdot 6 \cdot 3 + 2 \cdot 6 \cdot 3 \\
 &= 144 \text{ m}^2
 \end{aligned}$$

$$\begin{aligned}
 SA &= 2(lw + lh + wh) \\
 &= 2(12 \cdot 6 + 12 \cdot 6 + 6 \cdot 6)
 \end{aligned}$$



$$\begin{aligned}
 SA &= 6 \times 3 \\
 &= 18 \times 2 \\
 &= 36 \text{ m}^2
 \end{aligned}$$

$$\begin{aligned} SA &= 144 + 360 - 36 \\ &= \boxed{468 \text{ m}^2} \end{aligned}$$

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