

PRACTICE QUIZ

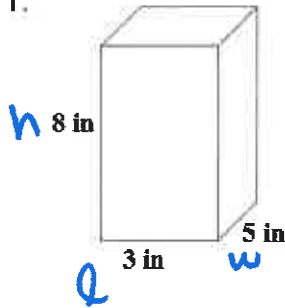
S.A. of Rectangular and Triangular Prisms

Name: Ms. B

Date: Mar. 4

Find the surface area of each object. Show your work, round your answers to the nearest hundredth, and don't forget units!

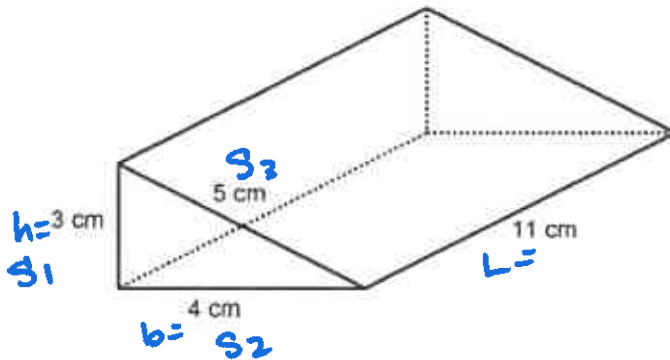
1.



$$\begin{aligned}
 SA &= 2(3 \times 8 + 5 \times 8 + 3 \times 5) \\
 &= 2(24 + 40 + 15) \\
 &= 2(79) \\
 &= 158 \text{ in}^2
 \end{aligned}$$

158 in²

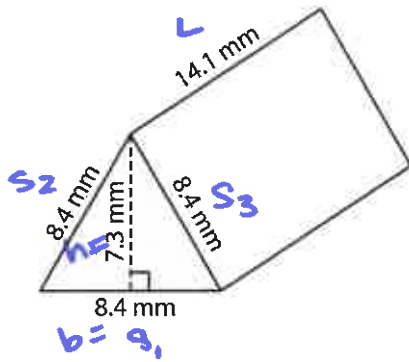
2.



$$\begin{aligned}
 SA &= 3(4) + 11(3 + 4 + 5) \\
 &= 12 + 11(12) \\
 &= 12 + 132 \\
 &= 144 \text{ cm}^2
 \end{aligned}$$

144 cm²

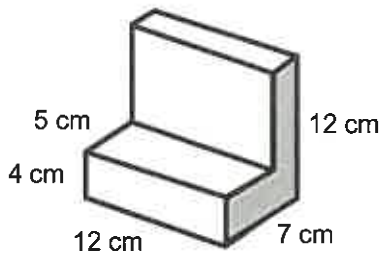
3.



$$416.64 \text{ mm}^2$$

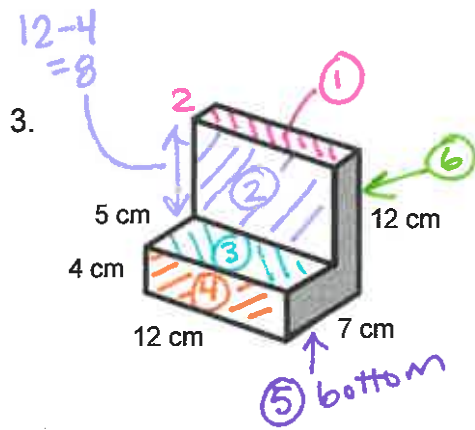
$$\begin{aligned} SA &= 8.4(7.3) + 14.1(8.4 + 8.4 + 8.4) \\ &= 61.32 + 14.1(25.2) \\ &= 61.32 + 355.32 \\ &= 416.64 \text{ mm}^2 \end{aligned}$$

4.



$$544 \text{ cm}^2$$

see
next
page...



$$544 \text{ cm}^2$$

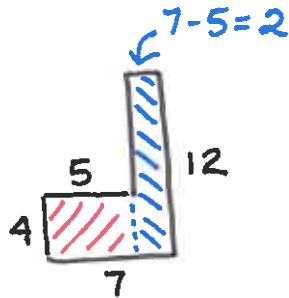
OPTION 1:

Ends (x2)

$$A = (5 \times 4) + (12 \times 2)$$

$$= 20 + 24$$

$$= 44$$



$$\textcircled{1} A = 12 \times 2$$

$$= 24$$

$$\textcircled{2} A = 12 \times 8$$

$$= 96$$

$$\textcircled{3} A = 12 \times 5$$

$$= 60$$

$$\textcircled{4} A = 12 \times 4$$

$$= 48$$

$$\textcircled{5} A = 12 \times 7$$

$$= 84$$

$$\textcircled{6} A = 12 \times 12$$

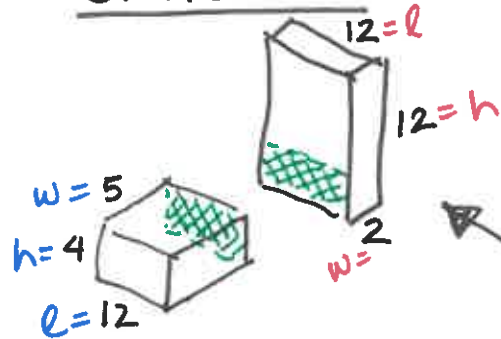
$$= 144$$

$$SA = (2 \times 44) + 24 + 96 + 60$$

$$+ 48 + 84 + 144$$

$$= 544 \text{ cm}^2$$

OPTION 2:



$$SA = 2(5 \times 4 + 12 \times 5 + 12 \times 4)$$

$$= 2(20 + 60 + 48)$$

$$= 2(128)$$

$$= 256$$

$$SA = 2(2 \times 12 + 12 \times 2 + 12 \times 12)$$

$$= 2(24 + 24 + 144)$$

$$= 2(192)$$

$$= 384$$

Remove 2x 4=w

$$= 2(12 \times 4)$$

$$= 2(48)$$

$$= 96$$

$$SA = 256 + 384 - 96$$

$$= 544 \text{ cm}^2$$