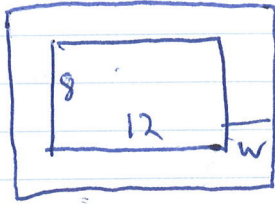


5.2.

pg 283 #12.



$$\begin{aligned}\text{Total Area} &= (8 \times 12) \times 2 \\ &= 192 \text{ cm}^2\end{aligned}$$

$$192 = (2w + 12)(2w + 8)$$

$$192 = 4w^2 + 16w + 24w + 96$$

$$0 = 4w^2 + 40w - 96$$

$$0 = w^2 + 10w - 24$$

$$0 = (w - 2)(w + 12)$$

$$\boxed{w = 2} \text{ or } w = \cancel{12}$$

not possible.