

4.4, 4.6's Key

(1) $54 u^2$ (2) 6 by 12 by 2

(3) 12 by 18 m
Total 72 m

$V = 144 \text{ in}^3$

(4) $150\pi \text{ ft}^2/\text{sec}$

(5) $-\frac{1}{2\pi} \frac{\text{in}}{\text{sec}}$ (6) $\frac{4 \text{ ft}^2}{\text{min}}$ (7) -4 mph

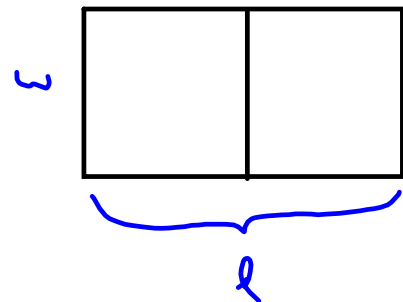
Hint for #3

(3)

$$A = 216 \text{ m}^2$$

$$A = lw = 216$$

$$l = \frac{216}{w}$$



$$P = 2l + 3w$$

$$= \frac{432}{w} + 3w$$

Then take derivative set it equal to zero ...