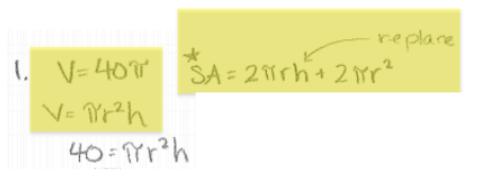
What I have What do I need?

Work it out!



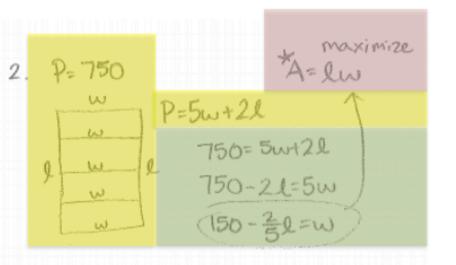
$$SA = \underline{\hspace{1cm}}$$
 (in terms of r) SA when $r = 5$

1.
$$V=40T$$
 ${}^*SA=2\pi rh + 2\pi r^2$
 $V=7r^2h$ $SA=2\pi r \left(\frac{40}{\pi r^2}\right) + 2\pi r^2$
 $40=7r^2h$ $SA=\frac{80}{r} + 2\pi r^2$



What do I need?

Work it out!



$$A = L (150 - \frac{2}{5}L)$$

$$A = 150R - \frac{2}{5}L^{2} \qquad A = 150(187.5) - \frac{2}{5}(187.5)^{2}$$

$$L = -150 = 187.5 \qquad = 14062.5$$

$$= -\frac{1}{2}(-\frac{2}{5})^{2} \qquad \text{The maximum area he can/enclose is } 14062.5 \text{ ft}^{2}$$

A candy store sells boxes of candy containing caramels and crèmes. Each box sells for \$12.50 and holds 30 pieces of candy (all pieces are the same size). If the caramels cost \$0.25 to produce and the crèmes cost \$0.45 to produce, how many of each should be in a box to make a profit of \$3?

30 = total number of candies in box

X = number of caramels

Y = number of cremes

- .25 = cost to produce and the caramels
- .45 = cost to produce and the crèmes
- 9.50 = cost to produce box (since were MAKING \$3 profit)

$$X + Y = 30$$

$$.25x + .45Y = 9.50$$

$$-.25 X - .25Y = -7.50$$

$$.25x + .45Y = 9.50$$

$$.20Y = 2.00$$

Y = 10 and X = 20

What I have What do I need?

Work it out!

What I have

What do I need?

Work it out!

When will it hit the ground?