

P. 367 Word Prob's (cont'd) Dec. 10

34. Given: Large pizzas cost \$12.50

Small pizzas cost \$9.00

38 pizzas were sold for \$415.50

Find: how many of each were sold

Let x = the # of small pizzas

then let $38 - x$ = # of large pizzas

$$9.00x + 12.50(38 - x) = 415.50$$

$$9.00x + 475 - 12.50x = 415.50$$

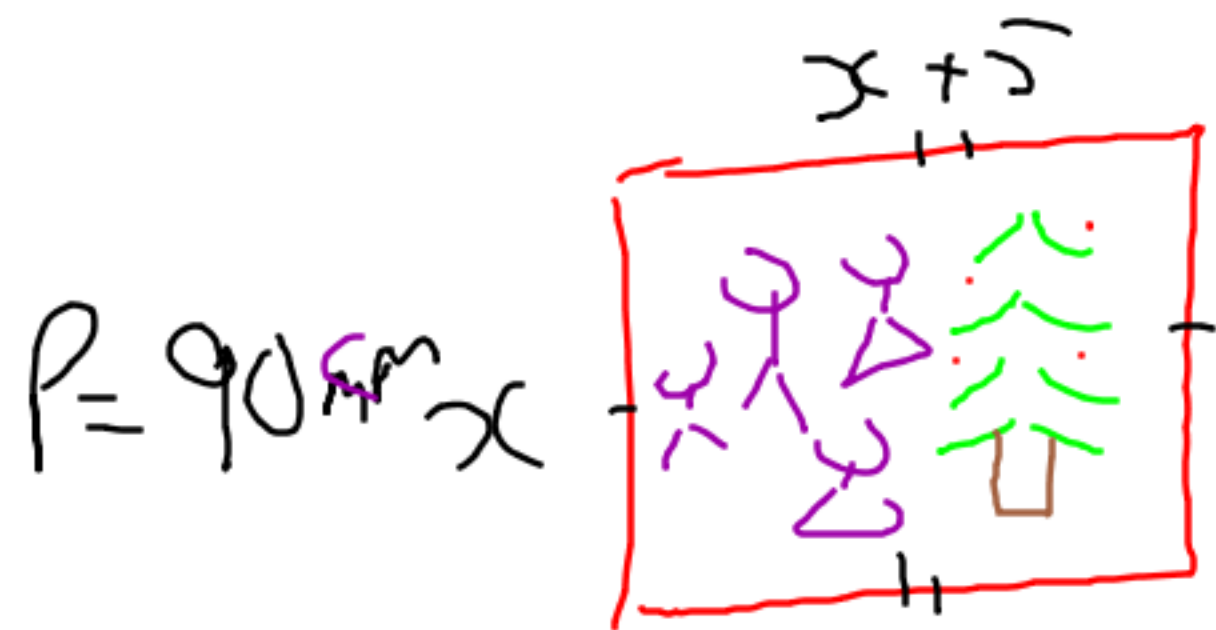
$$-3.50x + 475 = 415.50$$

$$\begin{array}{r} -3.50x + 475 = 415.50 \\ -3.50x = -59.50 \\ \hline -3.5 \end{array}$$

$$x = 17$$

$\therefore$ They sold 17 small pizzas
and 21 large pizzas

37. Given:



$$P = 2L + 2W$$

$$90 = 2(x + 5) + 2x$$

$$90 = 2x + 10 + 2x$$

$-10 \quad -10$

$$90 = 4x + 10$$

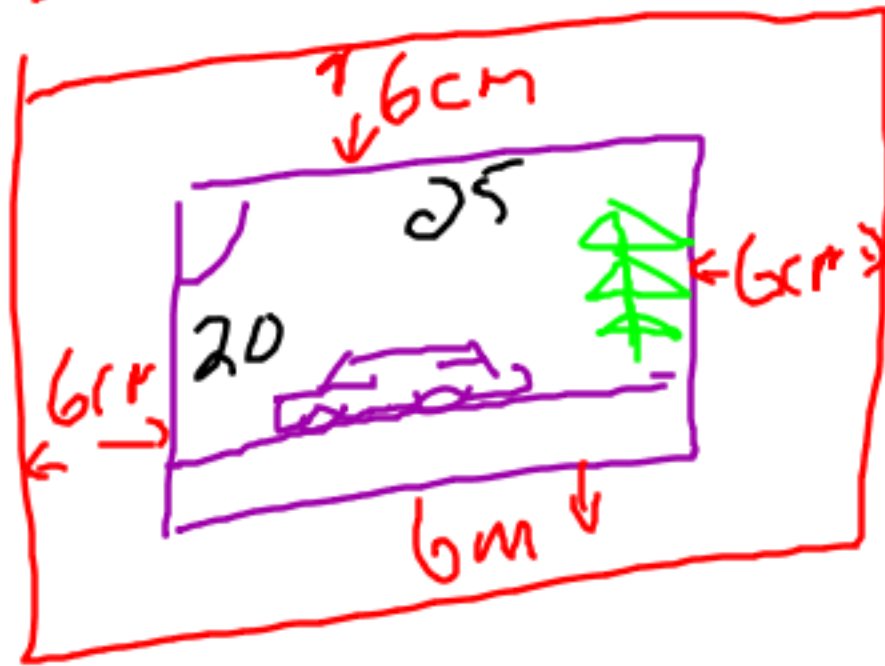
$$\frac{80}{4} = \frac{4x}{4}$$

$$x = 20$$

Find: the dimensions
Let x = the width
then let $x + 5$ = the length

$\therefore$ the width equals 20 cm and the length 25 cm.

37.6

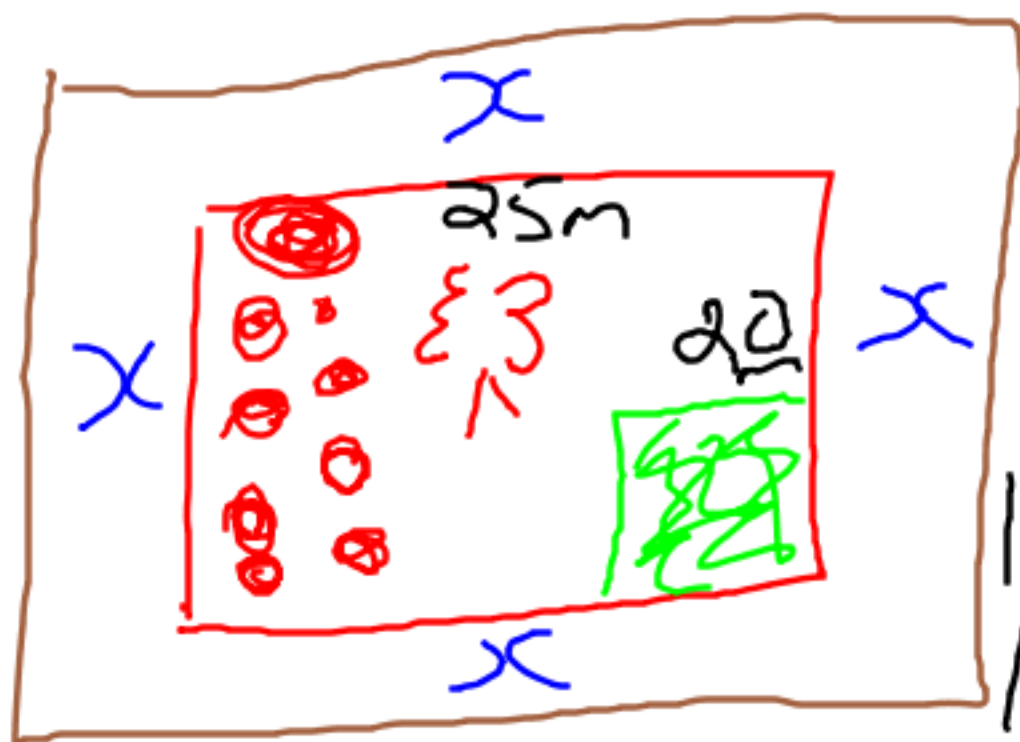


length with border
width with border

$$6 + 25 + 6 = 37\text{cm}$$

$$6 + 20 + 6 = 32\text{cm}$$

38.



$$P = 2l + 2w$$

$$114 = 2(2x + 25) + 2(20)$$

$$114 = 4x + 50 + 40$$

$$114 = 8x + 90$$

$$\frac{24}{8} = \frac{8x}{8}$$

$$x = 3$$

Outside perimeter is 114m

Find width of walkway

Let x = width of walkway

Then let $2x + 20$ = width with walkway

and let $2x + 25$ = length with walkway

$\therefore$ the walkway is 3m across/wide

Reorganize yourselves into your
whiteboard groups & do
's 2 & 3 on the handout

Homework
pg 366
33, 35, 36, 39