

$$2) \begin{cases} x+y=22 & \dots \textcircled{1} \\ x-y=6 & \text{add} \end{cases}$$

$$2x = 28$$

$$x = 14$$

Sub  $x$  in  $\textcircled{1}$

$$x+y=22$$

$$y = 22 - 14$$

$$y = 8$$

Thus, the couple  $(14, 8)$  is the solution set.

3) let  $l$  be length of rectangle  
and  $w$  be width of rectangle

$$\text{statement-1: } 2l + 2w = 44$$

$$l + w = 22$$

$$\text{statement-2: } l \times w = 112$$

$$\text{System: } \begin{cases} l+w=22 \\ l \times w=112 \end{cases}$$

The formed system is equivalent to the given system for  $l=x$  and  $w=y$

Thus, the length  $l = 14\text{m}$   
and the width  $w = 8\text{m}$ .