

1. solve graphically :  $x+2y \leq 8$   
 $x \geq 0$   $y \geq 0$

Sol<sup>n</sup> for inequality

$$x+2y \leq 8 \Rightarrow x+2y=8$$

$$x=0 ; y=4 \Rightarrow (0,4)$$

$$y=0 ; x=8 \Rightarrow (8,0)$$

origin test  $(0,0)$

$$0+2(0)=0 \leq 8$$

satisfies the origin test

that means origin will lie in the region subtended by inequality.

