

**Note:**

First example:

For initial bounty  $B = 300$ , the bounty will change as follows :

$i = 1$ :  $300 \leq 300$ , Trafalgar will run away.

$i = 2$ :  $300 > 200$ , Trafalgar will win and bounty will become 400

$i = 3$ :  $400 \leq 500$ , Trafalgar will run away.

$i = 4$ :  $400 > 100$ , Trafalgar will win and bounty will become 500

$i = 5$ :  $500 \leq 700$ , Trafalgar will run away.

After all the fights, the final bounty is less than or equal to  $L$

If  $B = 301$ , we will have:

$i = 1$ :  $301 > 300$ , Trafalgar will win and bounty will become 401.

$i = 2$ :  $401 > 200$ , Trafalgar will win and bounty will become 501.

$i = 3$ :  $501 > 500$ , Trafalgar will win and bounty will become 601.

$i = 4$ :  $601 > 100$ , Trafalgar will win and bounty will become 701.

$i = 5$ :  $701 > 700$ , Trafalgar will win and bounty will become 801.

After all the fights, the final bounty will be greater than  $L$ .

$B = 300$  is then the maximum initial bounty.