\_\_\_\_\_\_\_\_Helper \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1 find the relationship between f(n) and g(n)

a. `

Thus the

b.

Thus

c.

Thus

d.

Thus

e.

Thus

f.

Thus the

2.

a.

Prove if and then

Proof:

by definition means

means

Add above two inequity we got

Take

Then . By definition then .

b.

proof by counter example