1ssignment -2 1) +(n) = n-10 g(n) = n+10 f(n) = 0 (g(n))  $f(u) = (\cdot g(u))$ N-10,7(.(n+10) consider c= 1/2 n=1000 1000-10 2 1/2 (1000+10) 990 7-1/2 1010 Satisfied

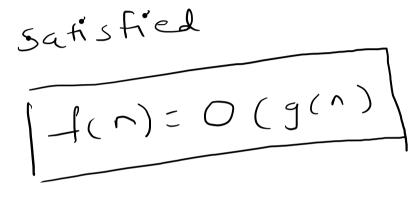
f(n) = q(n). ( Sarisfied

$$\frac{2}{f(n)} = n \\
f(n) = 0(g(n)) \\
f(n) \leq c \cdot g(n) \\
n \leq c \cdot n \\
c = 1/2 \\
f(n) = 0 (g(n)) \\
f(n) = 0 (g(n)) \\
f(n) = 0 (g(n))$$

3) 
$$(4^{10})_{2}^{10} \cdot 32^{10} = 0(5)$$
 $f(n) \leq (0.9(n))$ 
 $f(n) = 0.9(n)$ 
 $f(n) = 0.9(n)$ 

 $n^{11} > n^{5} \times$   $+ (n) \neq O(g(n))$ 

$$\frac{4}{2}$$
 = 0 (2)



3) 
$$128^{10}$$
  $128^{10}$   $128^{10}$   $109^{1$ 

