Homework3-3

- 1) lim tand = sich 4 4 then N=1/4
- 2 lin $ein(3u) = \frac{3cos(3u)}{6u}$ then $N = \frac{1}{2}$
- 3 lim ein(4t) 4008(4t) ein(6t) - 6008(6t) then N= 43
- (y) lim <u>ein(n-3)</u> = <u>cas(n-3)</u> n+3 n²+2n+5 = an+a then v= 1/8
- (b) $\lim_{\theta \to 0} \frac{\cos(\theta)-1}{6\sin\theta} = \frac{-\sin\theta}{8\cos\theta}$ then N=0
- 6 f(u)=vcosn du=5ncosn-veinn
- T f(u)=8n(einn+cos(u))

 f(u)=8(einn+cosn)+8n(

 cos(u)-ein(u))

 f(\frac{1}{4})=16/52

- (8) f(u) = 5 n eina cos u f'(u) = 5 (eina cos u) + 5 n (cos²u) -5 n ent (u)
- 9) f(u)= Reinntann f(u)= In(ein u taun)+ n² eina+ n² einn rec²n
- (10) $f(u) = \frac{\pi y}{(eiun + cos u)}$; $f(u) = \frac{\pi y}{(eiun + cos u)}$ $f(u) = \frac{\pi y}{(eiun + cos u)}$ $\frac{\pi y}{(eiun + cos u)}$; $\frac{\pi y}{(eiun + cos u)}$
- (1) f(u)= 2tann/u; f'(u)? f(u)=(2xec2u(u)-2tann)/n2
- (12) dy of einn dusa f einn cos n → - einn → - cos n → einen 69:14=3 then - cos n
- (3) $y = \lim_{x \to 0} y = ke^{x}$, $\lim_{x \to 0} ke^{x}$ and $y' = \cos x$; $y' = -ke^{x}$ $\lim_{x \to 0} \frac{3\pi}{2}$ then $\lim_{x \to 0} \frac{3\pi}{2} = ke^{x}$ $\lim_{x \to 0} \frac{3\pi}{2} = \lim_{x \to 0} \frac{3\pi}{2} = \lim_{x \to 0} \frac{3\pi}{2}$ $\lim_{x \to 0} \frac{3\pi}{2} = \lim_{x \to 0} \frac{3\pi}{2} = \lim_{x \to 0} \frac{3\pi}{2}$