$\int_{-\infty}^{\infty} \frac{f(n)}{g(n)} = \frac{h^n}{e^{nlnn}} = \frac{e^{nlnn}}{e^{nlnn}} = \frac{1}{e^{nlnn}}$ Therefore f(n) = O(g(n)) $\int_{1}^{\infty} \frac{f(n)}{g(n)} = \frac{a_n a_0 + a_n a_1 \cdots a_k a_k}{n + a_0 + a_0$ Prof.

1 im 36n) = ak-k! h+ and (ky) ak ak ak. k! morgania

1 im 1 (k+1)! · n = frong (k+1)! resignia

(k+1)! · n = frong (k+1)! resignia 四十二年 Since k, aro, lin few n(n) = L, where OXL < DO food 4 INF(a) < Inc + Inf(n) We can easily find a c'that mines c'hage) > hact (nga), e.g. c'= haga) +1 How. We get winer thin = older) inten = lesso (many) f(n) = 964 (20) h Int (n) = In (an) m improved to reside = 1007