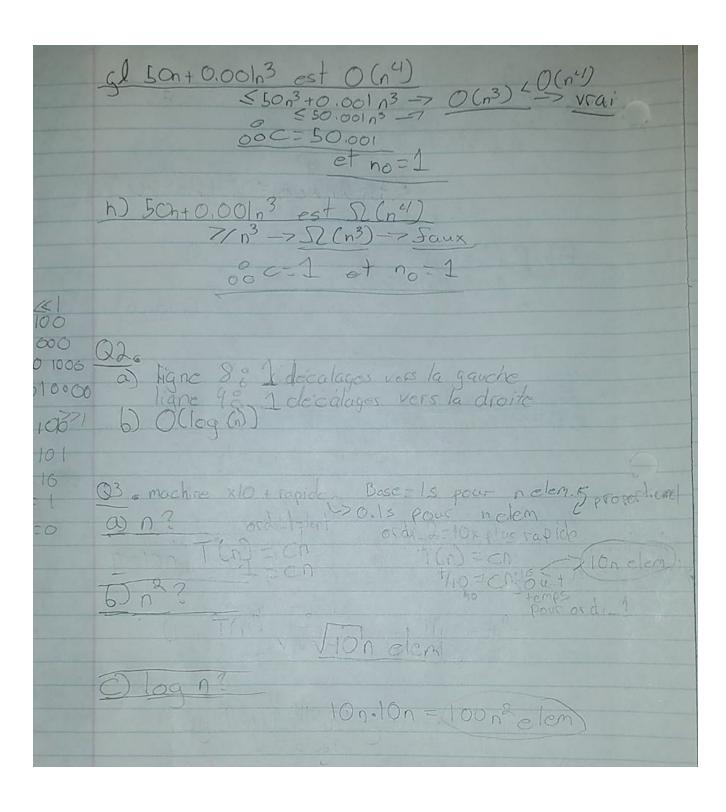
=>66) A -> == 1 Maximo Côté - Gagné 8851539 Devoic 1 (SI2510 0 = 2 toust 0 = 2 count Devoic 1 (31.2)

Q1. Vrai ou faux

a) $\log((n-2)(n+3))$ est $O(n^2)$ $\log(n^2+3n-2n-6) \le \log(n^2+n^2)$ $\le \log(2n+2)\log(n) \le n^2 + 2n^2 - > O(n^2) - > O(n^2)$ $\le \log(2n+2)\log(n) \le n^2 + 2n^2 - > O(n^2) - > O(n^2)$ 6) log((n-2) (n+3)) est I2 (n log n) log(n2+n-6) > 10g(n2) 7/nlog(n) -> 12 (nlog n) -> vrai ° = 1 & 10-2 C)(n+ log (n))(n+8) est O(n) 6 mgx = 2n2+8n+nlog(n)+8log(n) < 18n2 -> O(n2) -> faux 0 o c=18 & no = 1 d) (n+10a(n) (n+8) est @(n log n) (n+18n+nlog(n) +8log(n) > n2 > (2En2) 00 C= 1 et no = 1 ACn2) -7 Facex e) $n^2 + 2n^2 + 3n^2 + 4n^2 + 4n^3 = st O(n^2)$ O(max P est $n^3 \rightarrow O(n^3) \rightarrow Joux$ oo C = n(n+1) $n_0 = 1$ f) n°+2n°+3n°+1n°+...+n³ est s2(n°) 5) 7/n(n°) = s2(0°) = vra: 00 c= 1 & no=1



Q4. A=>[10:10|5] < Valeuss
0123 < index a) i) n=2->6inaire N=N

20N->O(N)

i) n=n N=N n~N

n·n~n·N~N·N~n²->o(n²) b) bood first = true; Arrays sort (A) 5 For (int is 0) ic A length: itt) & HES] ++;
First=Falso; 3 39(ACI)=:ACI++7) & 3 4914; elses HIS ++73 Sicst-toues