

Classifications of (math) functions

Constant	$f(x)=b$	$O(1)$
Logarithmic	$f(x)=\log_b(x)$	$O(\log n)$
Linear	$f(x)=ax+b$	$O(n)$
Linearithmic	$f(x)=x \log_b(x)$	$O(n \log n)$
Quadratic	$f(x)=ax^2+bx+c$	$O(n^2)$
Exponential	$f(x)=b^x$	$O(2^n)$

- Last column is “big Oh notation”, used in CS.
- It ignores all but dominant term, constant factors