CSE 332: Data Abstractions

QuickCheck: Asymptotics Solutions (due Thursday, October 8)

0. $\mathcal{O}$ boy!

For each of the following rows, circle each option on the right that is true for the function on the left and X each option that is false for the function on the left.

n^2	~~$\Theta(n)$~~	$\boxed{\Omega(n^2)}$	$\boxed{\mathcal{O}(n^n)}$	~~$\Theta(\log n)$~~
$2n + n\log n$	~~$\Theta(n)$~~	$\boxed{\mathcal{O}(n\log n)}$	~~$\Theta(\log n)$~~	~~$\Theta(N)$~~
$\log(3^n)$	~~$\Theta(\log n)$~~	$\boxed{\mathcal{O}(n)}$	$\boxed{\Omega(\log n)}$	$\boxed{\mathcal{O}(2^n)}$
$\log(n^3)$	$\boxed{\mathcal{O}(\log n)}$	~~$\Omega(n)$~~	$\boxed{\Omega(\log n)}$	~~$\Omega(n^3)$~~

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