CS-241 Data Structures, Fall 07

Lab 7 assignment

Indicate for each pair of expressions (A,B) in the table below, whether A is O, Θ, or Ω of B. Assume that $k \geq 1$, $e > 0$, and $c > 1$ are constants. Your answer should be in the form of "yes" or "no" in each box.

A	B	O	Θ	Ω
$\lg^k n$	n^e			
n^k	c^n			
$\sqrt{n}$	$n^{\sin(n)}$			
2^n	$2^{n/2}$			
$n^{\lg c}$	$c^{\lg n}$			
$\lg(n!)$	$\lg(n^n)$			