

R-3.6

Here is a list from lowest to highest, with equivalent functions on the same line.

$1/n$	
2^{100}	(this is $O(1)$)
$\log \log n$	
$\sqrt{\log n}$	
$\log^2 n$	
$n^{0.01}$	
$\lceil \sqrt{n} \rceil, \quad 3n^{0.5}$	(both are $O(\sqrt{n})$)
$2^{\log n}, \quad 5n$	(both are $O(n)$)
$n \log_4 n, \quad 6n \log n$	(both are $O(n \log n)$)
$\lfloor 2n \log^2 n \rfloor$	
$4n^{3/2}$	
$4^{\log n}$	(this is equal to $n^{\log 4} = n^2$)
$n^2 \log n$	
n^3	
2^n	
4^n	
2^{2^n}	