Problem 5

$f(n)$	$g(n)$	Your Answer
100	17	$f = \Theta(g)$
10^{200}	$n - 10^{200}$	$f = O(g)$
$n^2 \log 300$	$n \log n$	$f = \Omega(g)$
n^{100}	2^n	$f = O(g)$
$n \log n$	$n - 100$	$f = \Omega(g)$
$\sqrt{n}$	$\log n$	$f = \Omega(g)$
$n^{1.01}$	$n + 100$	$f = \Omega(g)$
$2 \log n$	$\log(n^2)$	$f = \Theta(g)$
$\log(n^2)$	$(\log n)^2$	$f = O(g)$