## Homework Assignment \#8 Due: October 17, 9:30 a.m.

1. Prove that $x \log x$ is $O\left(x^{2}\right)$, but $x^{2}$ is not $O(x \log x)$.
2. Prove that $f(x)$ is $\Omega(g(x))$ if and only if $g(x)$ is $O(f(x))$.
