Induction with Inequalities
Prove that $n^2 > 7n + 1$ for all integers $n \geq 8$

Solution:

Big-O Analysis

Prove that 2^n is $O(n!)$

Solution:

Big-O Analysis

Consider two functions $f(n)$ which is $O(2^n)$ and $g(n)$ which is $O(n!)$. Is it then the case that $f(n)$ is $O(g(n))$?

Solution: