2.11
Given Values are:
$m_H(N) = N + 1$, $\Delta = 0.1$, $d_v c = 1$
$E_{out}(g) = E_{in}(g) + \frac{8}{N} ln[\frac{4m_H(2N)}{\delta}]$
$E_{out}(g) = E_{in}(g) + \frac{8}{100} ln[\frac{4*(200+1}{0.1}]$
$E_{out}(g) = E_{in}(g) + \frac{8}{100} ln[\frac{801}{0.1}]$
$E_{out}(g) = E_{in}(g) + \frac{8}{100} [ln8010]$
$E_{out}(g) = E_{in}(g) + \frac{8}{100} * 8.9$
$E_{out}(g) = E_{in}(g) + 0.72$
Now take $N = 10,000$
$m_H(N) = N + 1$, $\Delta = 0.1$, $d_v c = 1$
$E_{out}(g) = E_{in}(g) + \frac{8}{N} ln[\frac{4m_H(2N)}{\delta}]$
$E_{out}(g) = E_{in}(g) + \frac{8}{10000} ln[\frac{4*(20000+1}{0.1}]$
$E_{out}(g) = E_{in}(g) + \frac{8}{10000} ln[\frac{80001}{0.1}]$
$E_{out}(g) = E_{in}(g) + \frac{8}{10000} [ln800010]$
$E_{out}(g) = E_{in}(g) + \frac{8}{10000} * 13.9$
$E_{out}(g) = E_{in}(g) + 0.010872$