Assignment #2
Due on Thursday, 26 January, 2012.

1. Show that if $\lim_{n\to\infty} a_n = L$ and $\lim_{n\to\infty} b_n = M \neq 0$, then $\lim_{n\to\infty} \dfrac{a_n}{b_n} = \dfrac{L}{M}$. *[10]*

Hint: This is easier if you first show that if $\lim_{n\to\infty} b_n = M \neq 0$, then $\lim_{n\to\infty} \dfrac{1}{b_n} = \dfrac{1}{M}$.