Math 222 - Quiz 9 **Section:** _____ **Name:** _____

Problem 1 (a) Show that there is an N such that for $n > N$ we have $\dfrac{1}{n^2+n-10} < \dfrac{2}{n}$. Your answer should explicity state what N is.

Problem 1 (b) Show that $\lim\limits_{n\to\infty} \dfrac{1}{n^2+n-10} = 0$ by using the definition of a limit.