

Math 151, Quiz # 9, November 5, 2013

1. Find all local minima and maxima for the function $g(x) = \frac{x+1}{x^2+4}$ which is defined on the whole real line.

2. Evaluate the following limits.

a) $\lim_{x \rightarrow \infty} \frac{e^x}{x+5}$

b) $\lim_{x \rightarrow 1} \frac{e^x - e}{\ln(x)}$

c) $\lim_{x \rightarrow \pi} \sin(x) \csc(x).$