

March 23, 2021

MAC 2311
Quiz 9 - Keeran & York

Remember to show all of your work.

Problem 1. Let $f(x) = \frac{1}{x^2 - 3x - 18}$.

- (a) Find the critical point(s) of $f(x)$.
- (b) Find the intervals on which $f(x)$ is increasing / decreasing.

Problem 2. Evaluate one of following limits (you can choose which):

- $\lim_{x \rightarrow 0} \left(\cot x - \frac{1}{x} \right)$
- $\lim_{x \rightarrow 1^+} (x - 1)^{x-1}$