MATH 131, Fall 2019   Name: _____

Quiz 2

09/19/19   Section:_____

For full credit you must present a clearly organized solution, showing all supporting calculations.

1. Use the limit laws to evaluate

$$\lim_{x \to 2} \ln \left[\frac{x^2 - 2x}{x^3 - 8} \right] .$$

2. Find all numbers c such that the function

$$f(x) = \begin{cases} 9 - x^2 & \text{if } x \geq 3 \\ -x^3 - 7cx - 4c^2 & \text{if } x < 3 \end{cases}$$

is continuous on $(-\infty, \infty)$.