Quiz 3 - MATH 151

DATE: Week 4, February 4 - 8

INSTRUCTOR: George Voutsadakis

Read each problem **very carefully** before starting to solve it. Each problem is worth 5 points. It is necessary to show **all** your work. Correct answers without explanations are worth 0 points.

GOOD LUCK!!

1. (a) Use the three-value table method to sketch the graph of the exponential function $f(x) = (\frac{1}{2})^x$. (2 points)

   (b) Use the graph of $y = f(x)$ from the previous part together with shifts and reflections to obtain the graph of the exponential function $g(x) = (\frac{1}{2})^{-x} - 3$. (3 points)

2. Solve the following exponential equation: $5^{x^2} \cdot \frac{1}{5^{10}} = (\frac{1}{125})^x$. (5 points)