

## 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!!**

- Use the three-value table method to sketch the graph of the exponential function  $f(x) = \left(\frac{1}{3}\right)^x$ . (2 points)
  - Use the graph of  $y = f(x)$  from the previous part together with shifts and reflections to obtain the graph of the exponential function  $g(x) = -\left(\frac{1}{3}\right)^{x+2}$ . (3 points)
- Solve the following exponential equation:  $3^{x^2} \cdot 27^x = 3^{28}$ . (5 points)