

## Quiz 3

MATH 1231 – Single-variable Calculus I  
Summer 2016

**Total Points:** 10

**Total Time:** 15 minutes

**Name:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Read all of the following information before starting the quiz:**

- Show all work, clearly and in order, to get full credit. I reserve the right to take off points if I cannot see how you arrived at your answer (even if your final answer is correct).
- Do not use calculators.
- Circle or otherwise indicate your final answers.

1. Find a slant asymptote of the function

$$y = \frac{2x^3 + x^2 + 1}{x^2 + 1}$$

2. Find the points on the ellipse  $4x^2 + y^2 = 4$  that are farthest away from the point  $(1, 0)$ .