

# Quiz 3A, Business Calculus

Fall 2014 - Dr. Graham-Squire

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

1. (4 points) Let  $f(x) = \frac{x^2 + 20}{x + 4}$ . Find all values of  $x$  where the tangent line will be horizontal.

2. (3 points) Calculate  $\frac{d}{dx} \left( \frac{7}{(x^3 - 4)^5} \right)$ . Simplify your answer, if possible.

3. (3 points) Let  $f(x) = (3x^7 - 2x + 4)^8 \sqrt{x^5 + 1}$ . Find  $f'(x)$ . You do NOT need to simplify your answer.