

Math 105 Section C
Quiz 2 (10 points)

Name: _____

- Show all your work to receive full credit for a problem.

1. Find the derivatives of the following functions. You may use only the power rule, the sum rule and the constant multiple rule for derivatives.

(a) $g(t) = \frac{3t^7}{4} - \frac{11}{5t^2} + 10$

(b) $f(x) = \sqrt{\frac{2}{x^3}} + 100x$

2. Let $f(x) = \frac{3}{x}$. Use this function to answer the questions that follow.

(a) Use the limit definition of the derivative to find $f'(2)$.

(b) Find an equation of the line tangent to the graph of f at $x = 2$.