

Math 150A, Fall 2007, Section 11  
Quiz 4

**Name:**

Show your work. No work, no credit.

1. Find the derivatives  $\frac{dy}{dx}$  when

- $y = \sqrt{x^5} + \frac{2}{x^3}$

- $y = \frac{x^3 - 2x\sqrt{x}}{x}$

2. The height, measured in feet, of a ball thrown vertically is given by  $s(t) = 64t - 16t^2 + \sqrt{2}$ , where  $t \geq 0$  is measured in seconds. When is the ball moving upward? What is its maximal height – that is the height when the ball is at rest?

3. Find the equation of the tangent line to the curve  $y = \frac{2x}{x+1}$  at the point  $(1, 1)$ .

Pledged

Honor code: I have neither given nor received help on this quiz.