

Name: _____
Student ID: _____

Quiz 3

This quiz is graded out of 10 marks. No books, calculators, notes or cell phones are allowed. You must show all your work, the correct answer is worth 1 mark the remaining marks are given for the work. If you need more space for your answer use the back of the page.

Question 1. §23.4 #27 (4 marks) The distance s (in m) above the ground for a projectile fired vertically upward with a velocity of 44.0 m/s as a function of time t (in s) is given by $s = 44.0t - 4.90t^2$. Find t for $v = 0$.

Question 2. §23.5 #19 (3 marks) Find the derivative of each of the functions.

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

Question 3. §23.6 #23 (3 marks) Find the derivative of each of the functions.

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