

Math 234 Quiz 3

Section : 8 AM Name: \_\_\_\_\_

1. Find the first and second derivatives.

$$f(T) = (2T + 1)^7$$

2. Liquid is pouring into a large vat. After  $t$  hours, there are  $3t^2 - \sqrt{t}$  gallons in the vat. At what rate is the liquid flowing into the vat (in gallons per hour) when  $t = 4$ ?