

Quiz 4

TQS 211

Show *all* your work (algebraically or geometrically) for each and simplify. No credit is given without supporting work.

1. For each rule of f given below, find f' .

(a) [2] $f(x) = 2x^3 + \sqrt{x}$

(b) [3] $f(x) = \ln(5x^4 - 2x)$

2. [5] Find the equation of the line tangent to the graph of $f(t) = 3^t$ at $t = 1$.