Name: January 28, 2016 MAC 2313.9256 Cyr

> Quiz 3 You must show all work to receive full credit!!

Problem 1. (5 pts) Find a parametrization of the tangent line $\mathbf{L}(t)$ to the curve $\mathbf{r}(t) = \langle 1 - t^2, 5t, 2t^3 \rangle$ at the point t = 2.

Problem 2. (5 pts) Calculate the length of the curve $\mathbf{r}(t) = \langle t^{3/2} + 2, -3, \frac{4}{3}t^{3/2} \rangle$ over the interval $1 \le t \le 4$.