

Math 151**Quiz 6**

Show all work in a neat and organized fashion. Clearly indicate your answers.
10 points possible.

1. (5 pts.) Let $f(x) = (2 - 3x)^{-1/2}$. Find $f'(x)$ and $f''(x)$.

2. (5 pts.) An airplane flying horizontally at an altitude of 3 mi and a speed of 480 mi/hr passes directly above an observer on the ground. How fast is the distance from the observer to the airplane increasing 0.01 hr later?