Answer all questions and show your work. Unsupported answers may receive no credit. You may not use a calculator on this quiz. Allow 15 minutes for the quiz.

Name: $\qquad$ Section: $\qquad$

1. (a) (5 points) Find the center of mass of the region bounded by the curves $y=e^{x}, y=0, x=0$ and $x=1$. (Assume constant density.)
(b) (5 points) Graph $x=\sqrt{t}$ and $y=1-t$ for $t \in[0,4]$. Find the derivative at $t=1$.

