E E 311

Quiz1 (10pts)

August 21, 2013

Name _____

ID _____

1. A transresistance amplifier with $R_i = 500\Omega$, $R_m = 1000\frac{V}{A}$, and $R_o = 100\Omega$ is fed with a signal current-source, i_s , having a resistance $R_s = 4.5K$ and is connected to a load resistance, $R_L = 900\Omega$.

(5pts)

a) Draw the complete circuit for the amplifier, the source and load and label all elements.

(5pts)

b) Determine the transresistance gain, $R = \frac{v_L}{i}$ where v_L is the voltage across the 900Ω load resistor.