

ELEC 302 Lab 2

Xander Naumenko

04/03/24

Question 1.1. The equations, derived in class [TODO: derive]:

$$v_+ = V_{TL} = -L_+ \frac{R_1}{R_2}, V_{TH} = -L_- \frac{R_1}{R_2}.$$

Question 1.2.

$$\frac{R_2}{R_1} = \frac{L_+}{3} = \frac{13}{3} \approx 4.67.$$

Thus as good approximation we used a $4.7\text{k}\Omega$ and a $1\text{k}\Omega$ resistor for a ratio of 4.7.

Question 1.4. Experimentally, $V_{in} = 6.5\text{V}$

Question 2.1. From the prelab, $T = RC \ln \frac{V_+ - V_-}{V_{ref}} = 1.4$

Question 2.2. Measured: $V_{ref} = -2.75$