

EXPERIMENT

1. Build the circuit in figure 1. From your prelab, determine reasonable peak-to-peak amplitude for V_{IN} . Set the waveform to triangle and frequency to 1kHz . Using X/Y mode of the oscilloscope to plot V_{OUT} vs. V_{IN}

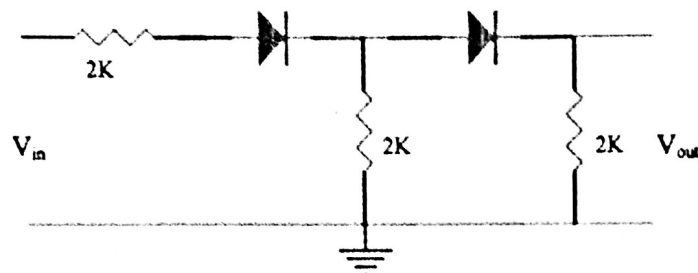


Figure 1

2. Build the circuit shown in figure 2.

- a) Set $V_{IN} = 10V_{pp}$ sine wave at 1kHz with no DC component. Use oscilloscope to plot V_{OUT} vs. time and V_{IN} vs. time on the same axis.
- b) Repeat (a) with $V_{IN} = 0.8V_{pp}$
- c) Repeat (a) for circuit in figure 3. Find the **amplitude** of the ripple.
- d) **Comment** on the observed results and computed results.

4 (yellow V_{in} , blue V_{out})

6 - 3V
7 w/amplitude

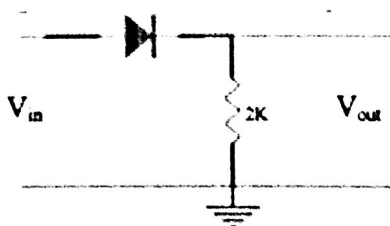


Figure 2

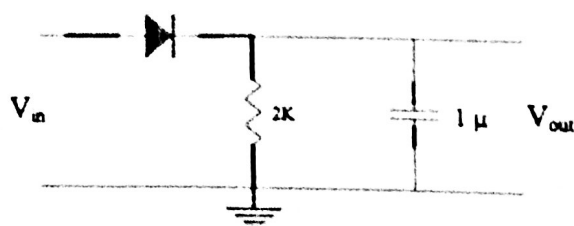


Figure 3