

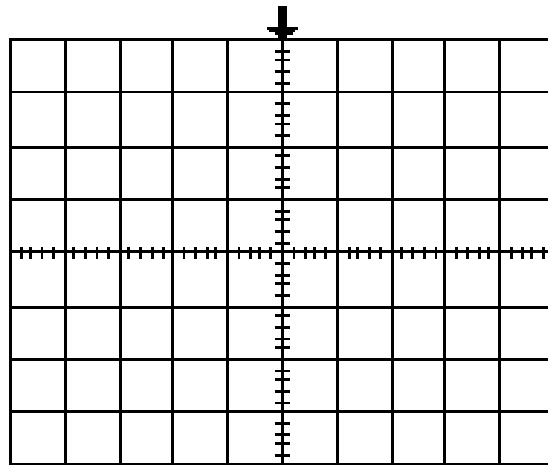
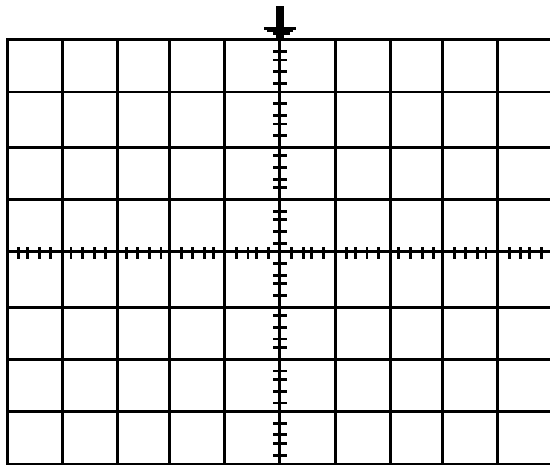
EE-100 Lab Report: **Nonlinear Circuit Synchronization Phenomenon and Design of Frequency Dividers**

Name: _____

TA: _____

Section: _____

1-a) Output and Capacitor voltage



- Parameters
- Frequency:
 - Amplitude (V_{pp}):
 - Duty cycle:

1-b)

Amplitude of the oscillator (V_{pp}):

Amplitude of the triggering signal (V_{pp}):

Ratio:

1-c)

Direction of drifting if the triggering frequency is slightly greater:

Direction of drifting if the triggering frequency is slightly lower:

2-a)

Frequency range for synchronization:

Minimum amplitude level for triggering:

2-b)

Synchronization range for frequency division by 2:

Synchronization range for frequency division by 5:

Synchronization range for frequency division by 10:

Draw capacitor voltage and triggering signal for frequency division by 4.

