

**LAB-1**

# **Objective:**

# General information about lab.

# Oscilloscope and function generator operations.

# Grading, attendance…

Requirements:

* Function Generator
* Oscilloscope
* DC Power Supply
* Cables
* Avometer (Multimeter)

**Important Note:** Check that your cables are working properly before starting each experiment.

Lab Work:

1. Make all the necessary adjustments to clearly display a **5000-Hz 6 Vp-p sinusoidal signal** on the oscilloscope. Establish the zero volt line at the center of the screen.

**Vertical sensitivity = Horizontal sensitivity =**

* **Unit of sensitivity is volt/div.**

2) Draw the waveform on Figure 1.

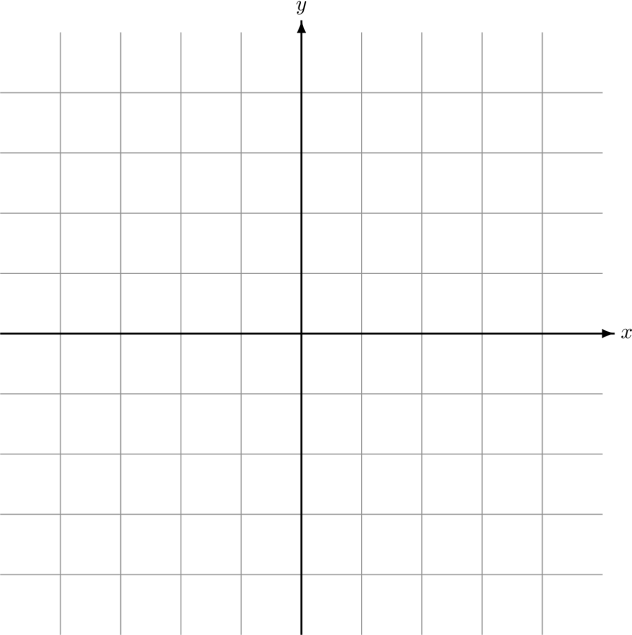


Figure 1

3) Calculate **the period of the waveform** on the screen using the number of

horizontal divisions for a full cycle as shown.

**T(calculated) =**

4) Repeat (1) for a **200-Hz 0.8 Vp-p sinusoidal waveform** on Figure 2*.*

**Vertical sensitivity = Horizontal sensitivity =**

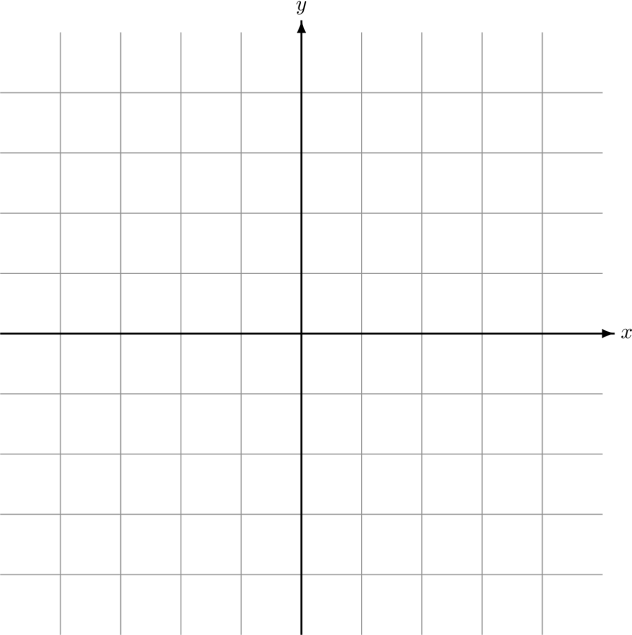


Figure 2

**T(calculated) =**

5) Repeat (1) for **100-kHz 4 Vp-p square wave** on Figure 3.

**Vertical sensitivity = Horizontal sensitivity =**

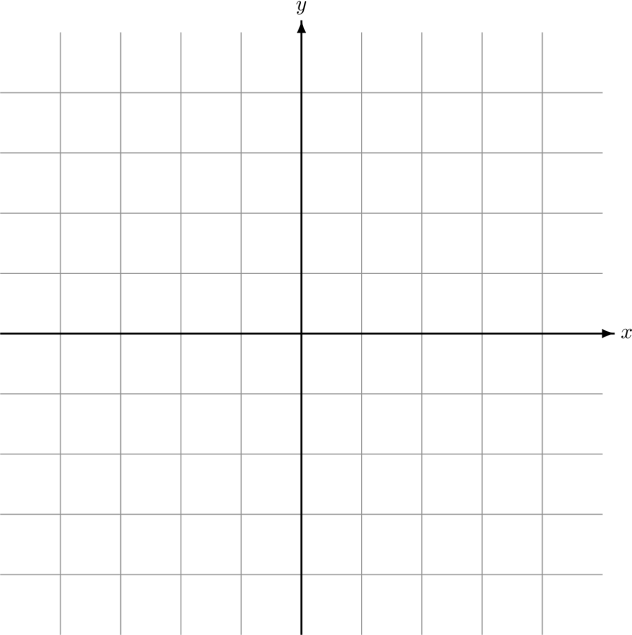


Figure 3

**T(calculated) =**