“Divisor de Voltaje y de Corriente”

Practice 6

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# Practice development

Build a circuit (showed in figure below) on the protoboard. Once built, select sine on the generator and set a value of 5 VRMS, and set frequency as showed in table below. Measure values (see table below) and fill the blank spaces.

Imagen que contiene texto

Descripción generada automáticamente

Table of Values

|  |  |  |
| --- | --- | --- |
| Frequency (Hz) | Measured Values | |
| VRMS in C1 | VRMS in C2 |
| 60 | 509 milli | 800 milli |
| 600 | 800 milli | 2.43 |
| 6 K | 624 milli | 2.78 |
| 60 K | 170 milli | 750 milli |

# Questionary

## What is reactance and impedance?

When we talk about impedance, we talk about reactance, because impedance is based on Resistance + Reactance, and we use this to convert units of Henrys and Faradays to Ohms, because all of us know that every element of circuits has resistance. And Reactance tell us what kind of element is, positive for Henrys and negative for Faradays.

## What is susceptance and admittance?

This is literally the inverse of the previous question, and works by this way: admittance is equal Resistance + Susceptance.

## What relation have VRMS and VP-P?

Well, has a relation, VRMS = (2^1/2) (Vp-p)/2

# Conclusions

## Cabañas Baxcajay Jesús Francisco

Mesh method for analysis of circuits is very useful in complex flat circuits, we observed that in this method, we have to apply Kirchhoff Currents Law and Ohm Law in every mesh, and then, after solving an equations system, we have every current for each mesh. It generally allows for the solution of a large network with fewer unknown values and fewer simultaneous equations.

## Hernández Velázquez Ángel

The alternating current presents the same behavior as the direct current, only with the difference within its calculations. As it was observed in the oscilloscope, the capacitors affect the behavior of the wave a bit.

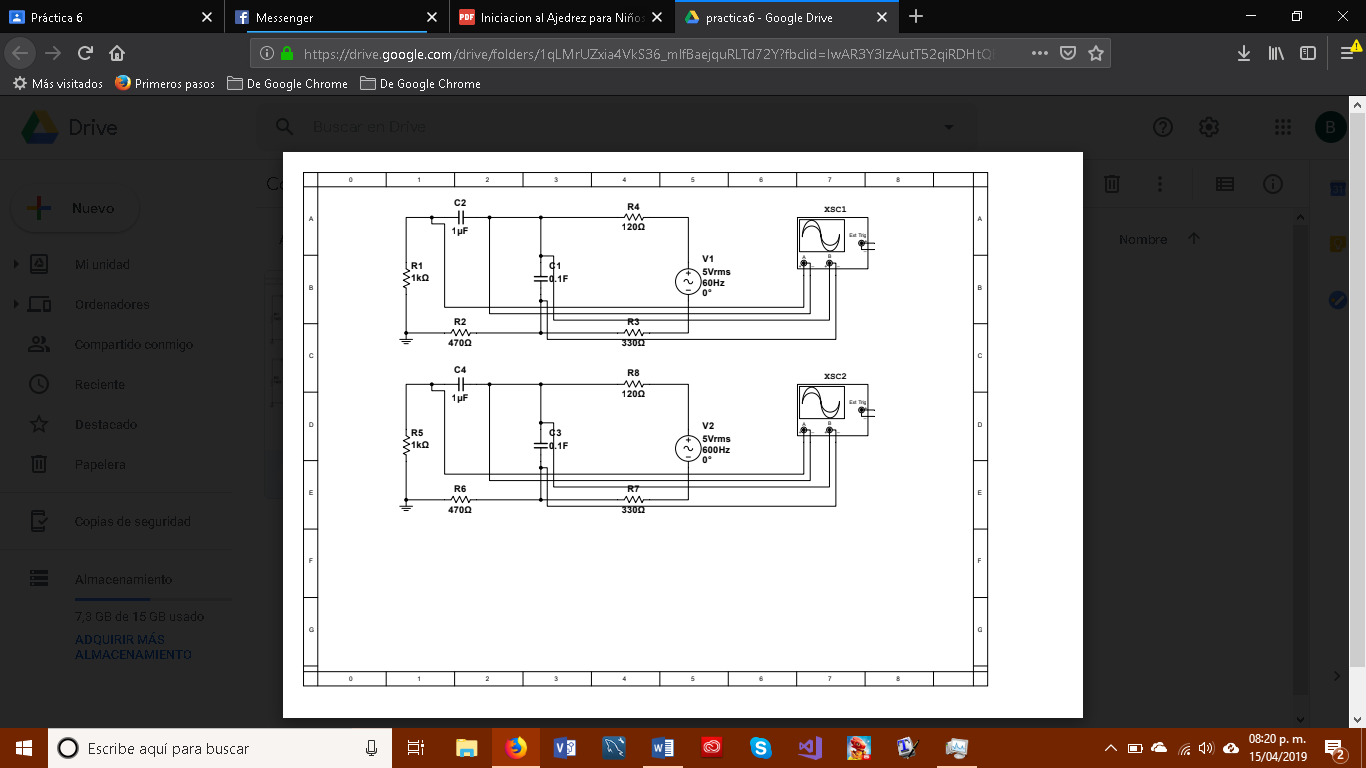
## Martínez Coronel Brayan Yosafat

It is amazing that there are equations for these things, because this make us a bridge between this units. And that marks easier ways to calculate thing related to this. It is like Euler equation, a bridge between imaginary numbers and real numbers. We can combine knowledge of imaginary numbers in Electricity.

# Calculations

There were no calculations.

# Simulations



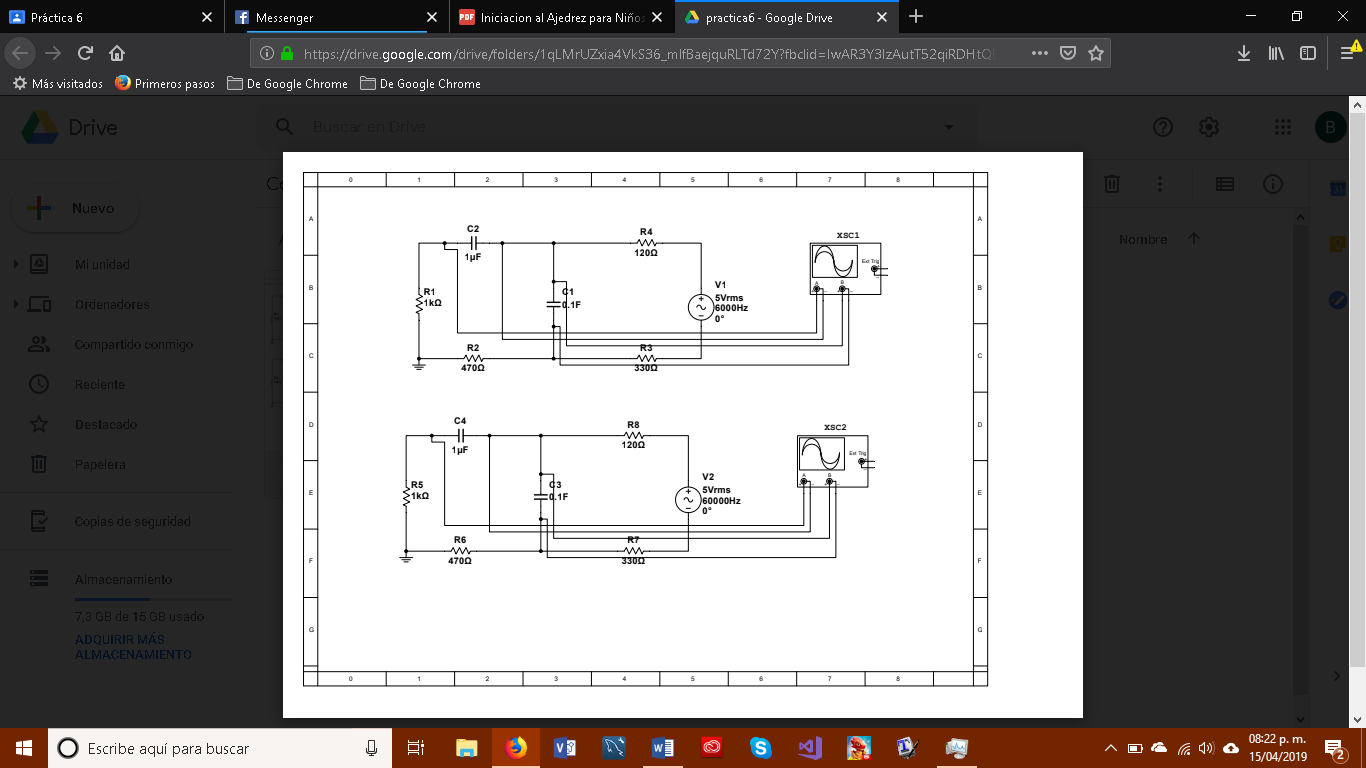


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Descripción generada automáticamente