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| **Title** | 13th homework in the Electric Circuit Theory class by 201923250 |

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**Summarization for sections from 12.1 to 12.3**

Circuits or devices of the same frequency at which the ac sources work, but various stages are called polyphases. A generator consisting of three sources with the same amplitude and frequency but with 120° out of phase is generated by a three phase system.

Due to the prestigious and economic polyphase method in this chapter, the three-stage system is by far the most widely used and the most economical one.

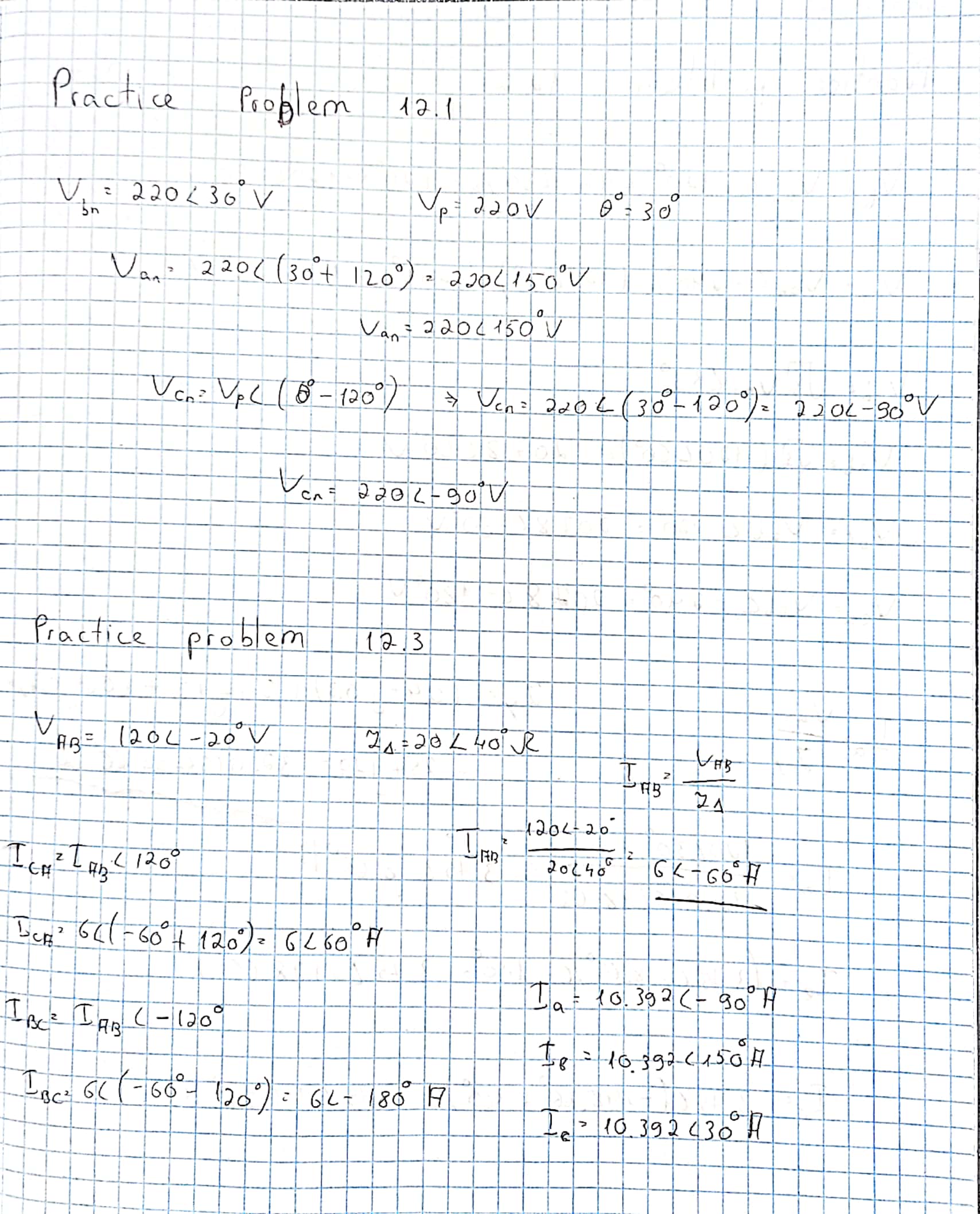
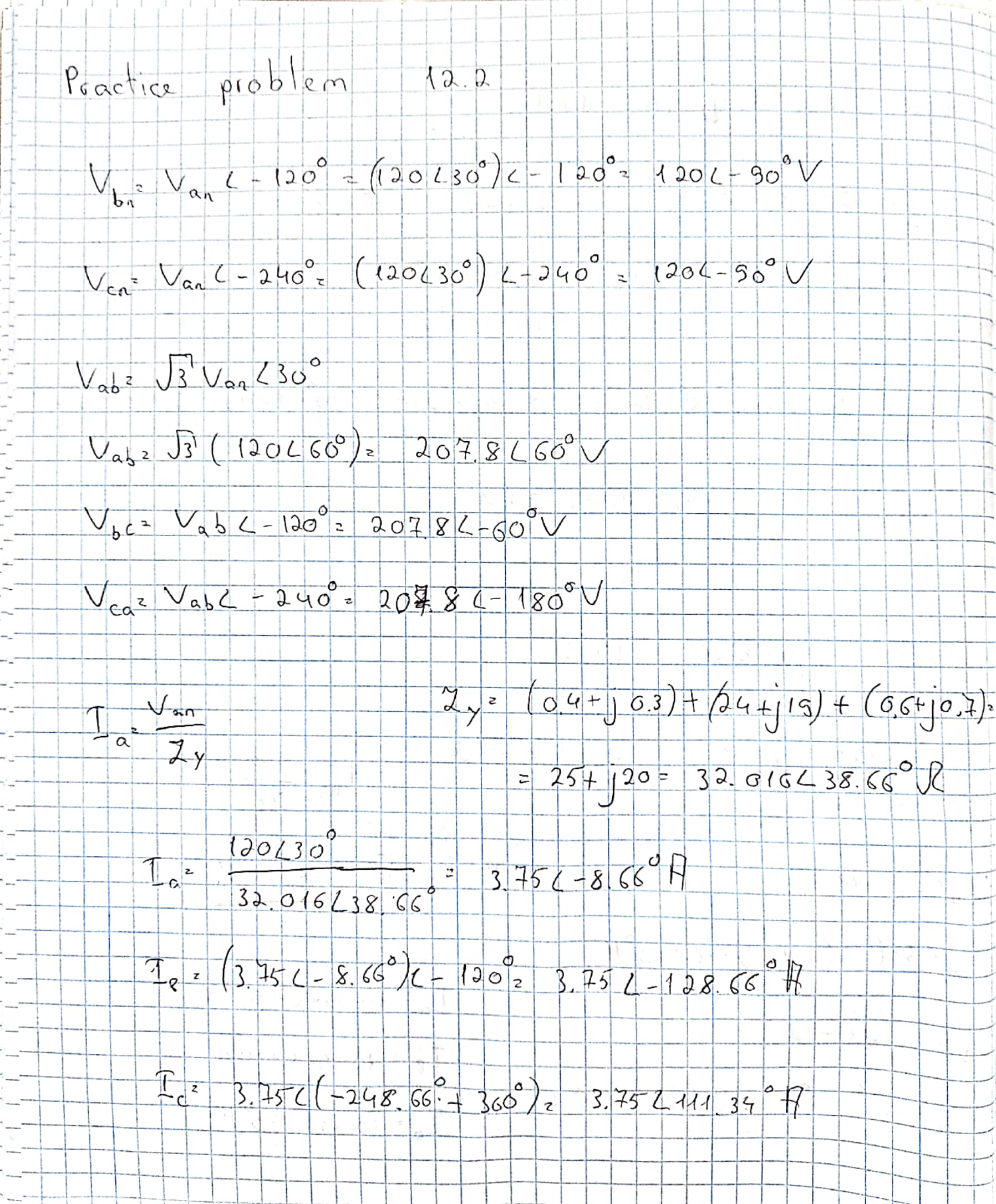
Although each coil can be viewed as an individual phase generator, it is possible to control both the single and the three phase loads with the three-phase generator.

We have addressed single-phase circuits so far in this text. One step ac power grid involves an electric motor connected to a load by means of a pair of wires (a power line).

This comprises two similar sources (equal magnitude and phase) connected by two external cables and the neutral to two loads. For instance, a single-stage three-wire system for the usual household system, as the terminal voltages have the same magnitude and phase. This system requires all 120- and 240-V devices to be connected.

The Step Series is the time order in which your respective maximal values pass through the voltages. A balanced load is the same in the scale and phase of the phase impedances.

A balanced Y-Y system is a three-phase, Y-connected source and Y-connected load system.

**Solutions for Practice problems**