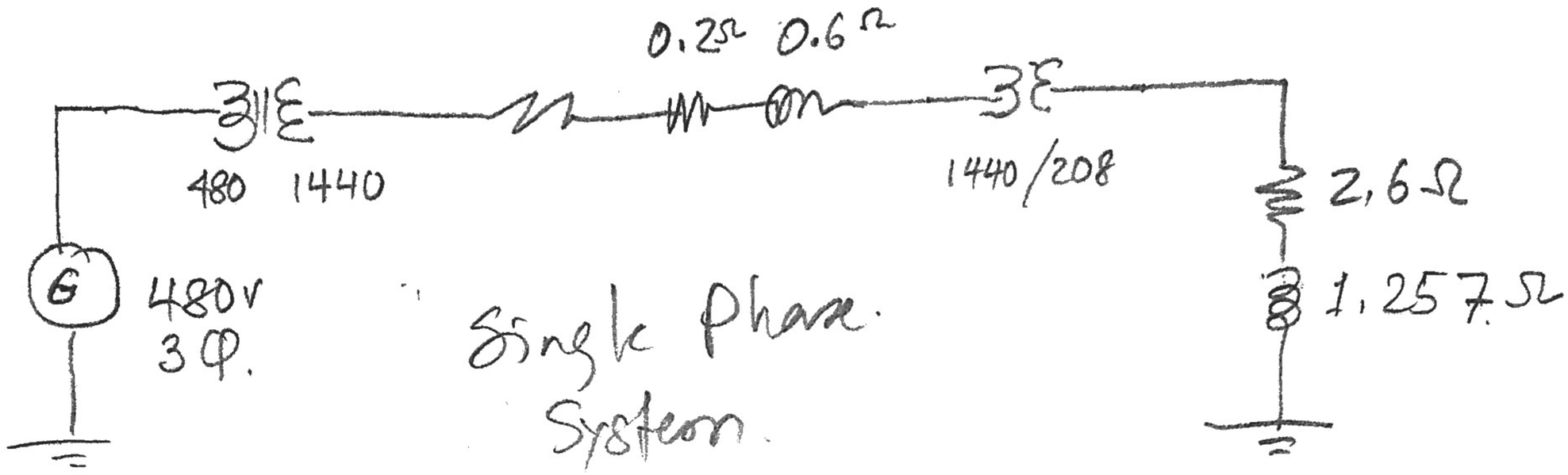
Prob #2

A balanced three phase load of 3000 KW, power factor 0.8 Lagging, is supplied at 22000 V (Line-to-Line) Over a Line having a resistance of 3Ω and an inductive reactance of 10Ω per conductor (or Line to Neutral)

Monitor the following variables.

(a) Line Current
(b) Line-to-neutral voltage at load.
(c) Voltage drop in the transmission Line.
(d) Power Loss in all three Conductor.
(e) Line-to-neutral voltage at the Source
(f) Line-to-Line voltage at the Source.

Problem # 9.



Monitor following variables:

(a) Voltage at the generator end

(b) Line Loss per phase and total for all three phase.

(c) Voltage at the load end

(d) Current at the load end.

(e) Current at the source end.

(f) Current in the transmission line. between the two transformer.

Prob # 4 Repeat Problem #3 with 3φ balanced Y-Connected Load.