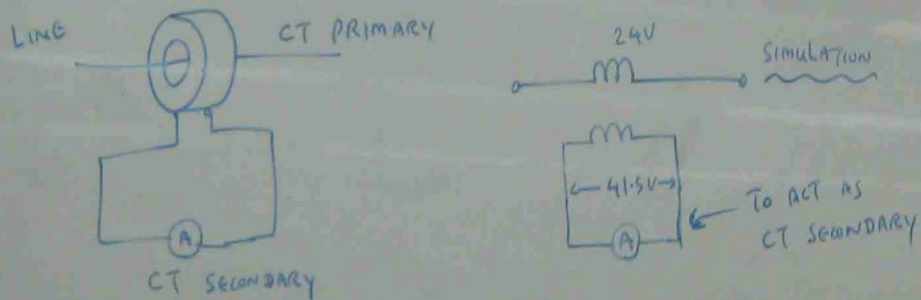
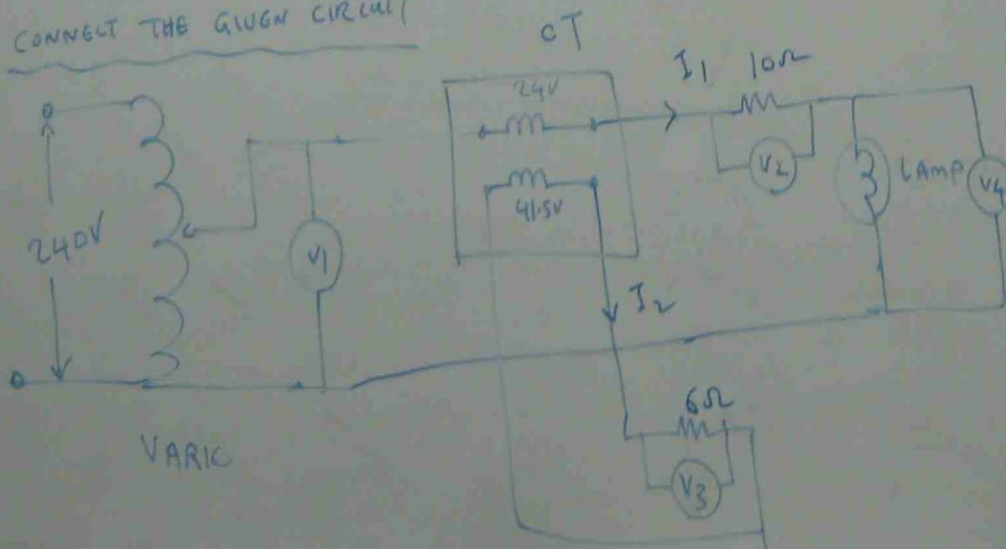


POWER SYSTEM PROTECTION PRACTICAL (2)

CURRENT TRANSFORMER RATIO



CONNECT THE GIVEN CIRCUIT



TAKE THE READINGS & FILL IN THE TABLE

| CT RATIO | | | | | |
|----------|-------|------------------------------|-------|-----------------------------|-----------------------|
| V_1 | V_2 | $I_1 = \frac{V_2}{10\Omega}$ | V_3 | $I_2 = \frac{V_3}{6\Omega}$ | $\frac{I_1}{I_2} = a$ |
| 4V | | | | | $a_1 =$ |
| 5V | | | | | $a_2 =$ |
| 6V | | | | | $a_3 =$ |
| 7V | | | | | $a_4 =$ |

AVERAGE CT RATIO = $\frac{a_1 + a_2 + a_3 + a_4}{4}$

THEN ADJUST

$$V_3 = 0.3 \text{ V (OR)} I_2 = \frac{0.3}{6} = 0.05 \text{ A}$$

USE CT RATIO AND CALCULATE
PRIMARY CURRENT I_1

$$I_1 = \text{AVERAGE CT RATIO} \times 0.5 \text{ AMP}$$

=

THEN MEASURE V_2 AND FIND

$$I_1 = \frac{V_2}{10 \Omega}$$

COMPARE CALCULATED RESULT AND MEASURED RESULT.

