

1) Balanced Y sources

$$-V_{an} = 120 \angle 0^\circ$$

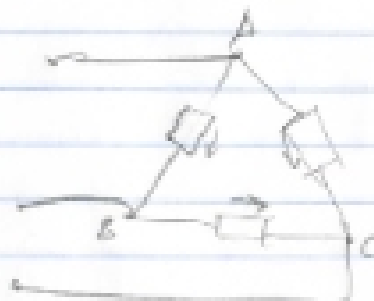
$$2) Z_s = 0.2 + j0.5 \Omega/\phi$$

$$3.) Z_{line} = 0.3 + j0.9 \Omega/\phi$$

4) Balanced Δ Load

$$-Z_{\phi} = 118.5 + j85.8 \Omega/\phi$$

$$Z_T = \frac{119.5 + j86.8}{3} = 39.8 + j28.6 \Omega/\phi$$



$$I_{AB} = \frac{1}{\sqrt{3}} I_{ca} \angle 60^\circ$$

$$-I_{ca} = I_{AB} - I_{ac} = 0$$

$$I_{ca} = I_{AB} - I_{ac}$$