

**Thevenin's Theorem (46:28)**

**Maximum Power Transfer Theorem (16:50)**

**DC Norton's Theorem (28:09)**

For the below circuits, given  $E = 16V$ ,  $R_1 = 300 \Omega$ ,  $R_2 = 200 \Omega$ ,  $R_3 = 340 \Omega$ , and  $R_4 = 290 \Omega$ :

- 1) Determine the Thevenin's equivalent circuit seen by variable load resistor  $R_L$
- 2) Determine the value of variable load resistor  $R_L$  that dissipates maximum power.
- 3) At conditions of maximum power determine the voltage across, the current through, and the power dissipated by variable load resistor  $R_L$ .
- 4) Determine the Norton's equivalent circuit seen by variable load resistor  $R_L$

