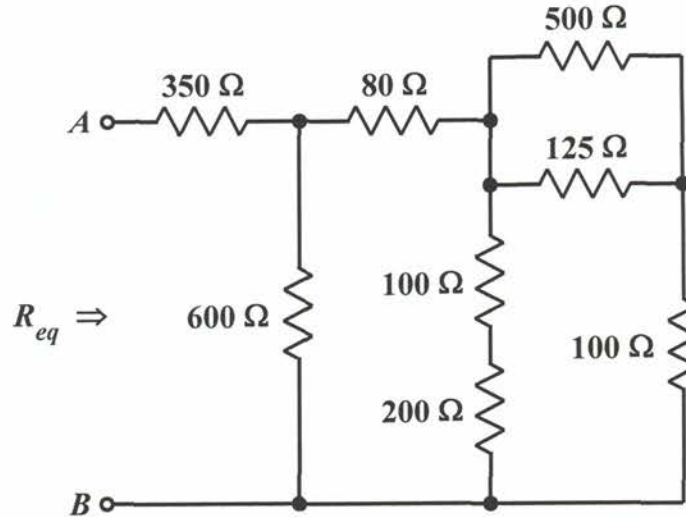


EE 2240  
Problem #03

Use a sequence of series and parallel combinations to reduce the circuit shown below to a single equivalent resistance,  $R_{eq}$ , with respect to terminals  $A$  and  $B$ .



$$500\ \Omega \parallel 125\ \Omega = 100\ \Omega$$

$$100\ \Omega + 100\ \Omega = 200\ \Omega$$

$$100\ \Omega + 200\ \Omega = 300\ \Omega$$

$$300\ \Omega \parallel 200\ \Omega = 120\ \Omega$$

$$80\ \Omega + 120\ \Omega = 200\ \Omega$$

$$600\ \Omega \parallel 200\ \Omega = 150\ \Omega$$

$$R_{eq} = 350\ \Omega + 150\ \Omega = 500\ \Omega$$