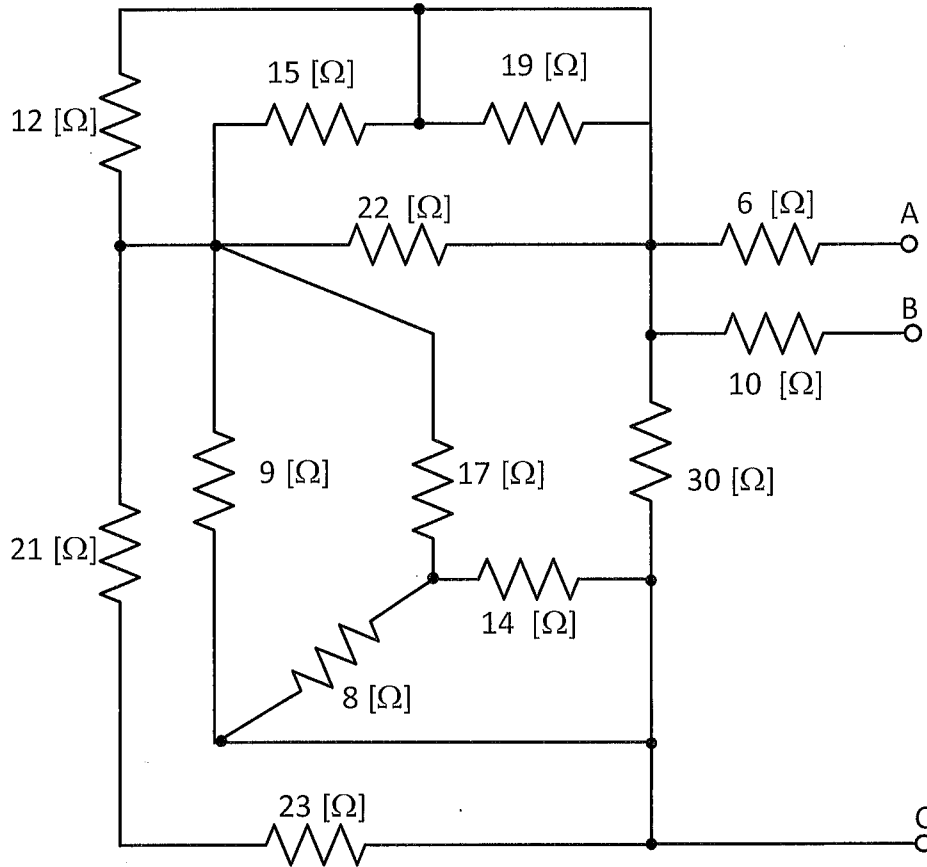


For the circuit below, do the following.

- Find the equivalent resistance at terminals A, C.
- Find the equivalent resistance at terminals A, B.



We can ignore $19[\Omega]$ since it is shorted. For the equivalent resistance R_{AC} , we ignore $10[\Omega]$ at B.

a) Then... $12[\Omega] \parallel 15[\Omega] \parallel 22[\Omega] = 5.116[\Omega]$

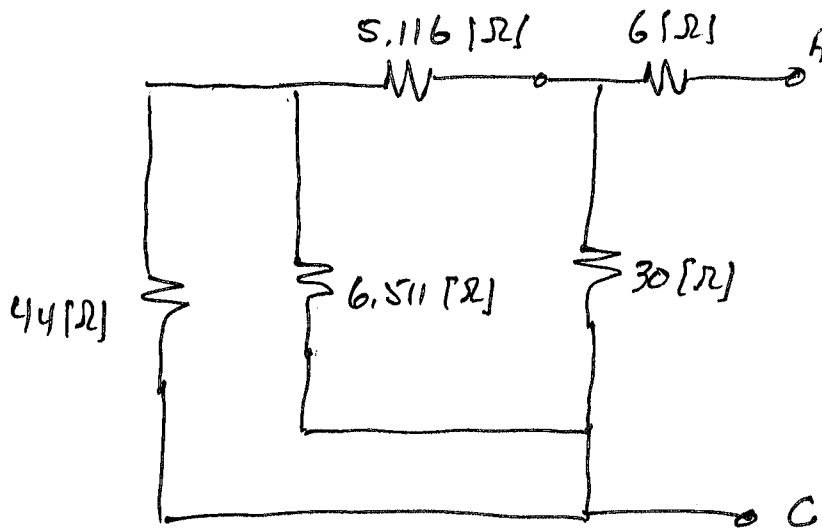
$$(8[\Omega] \parallel 14[\Omega] + 17[\Omega]) \parallel 9[\Omega] = 6.511[\Omega]$$

$$21[\Omega] + 23[\Omega] = 44[\Omega]$$

Re-draw...

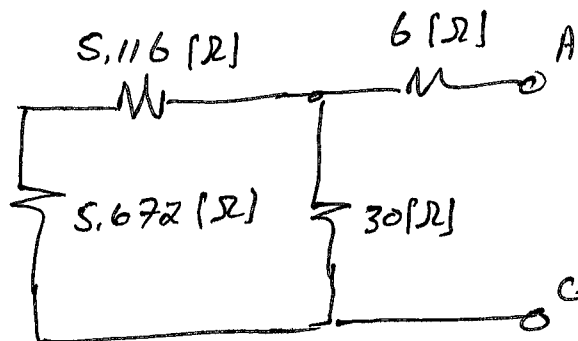


Room for extra work



$$44 [\Omega] \parallel 6.511 [\Omega] = 5.672 [\Omega]$$

Re-draw...



$$R_{AC} = (5.116 [\Omega] + 5.672 [\Omega]) \parallel 30 [\Omega] + 6 [\Omega] = 13.93 [\Omega]$$

b) $R_{AB} = 6 [\Omega] + 10 [\Omega] = 16 [\Omega]$