

2.52 Find R_{AB} in the circuit in Fig. P2.52.

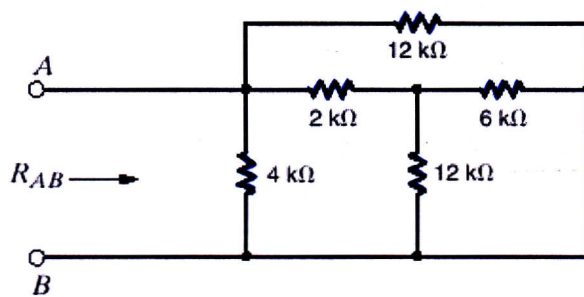
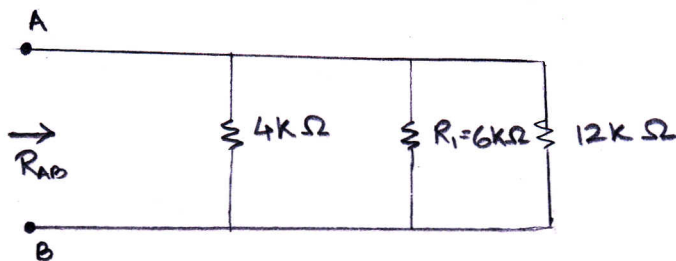


Figure P2.52

SOLUTION:

$$R_1 = (12\text{ k}\Omega \parallel 6\text{ k}\Omega) + 2\text{ k}\Omega$$

$$R_1 = 6\text{ k}\Omega$$



$$R_{AB} = (4\text{ k}\Omega \parallel 6\text{ k}\Omega) \parallel 12\text{ k}\Omega$$

$$R_{AB} = 2.4\text{ k}\Omega \parallel 12\text{ k}\Omega$$

$$R_{AB} = 2\text{ k}\Omega$$