

FIGURE 2-11 Circuit for demonstrating Kirchhoff's current law.

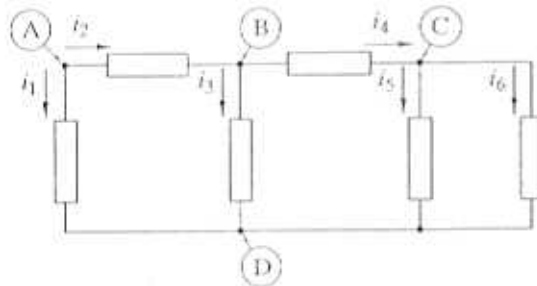


FIGURE 2-12

FIGURE 2-13 Circuit for demonstrating Kirchhoff's voltage law.

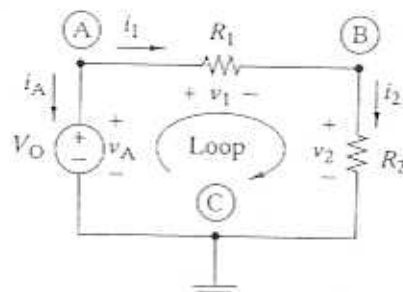
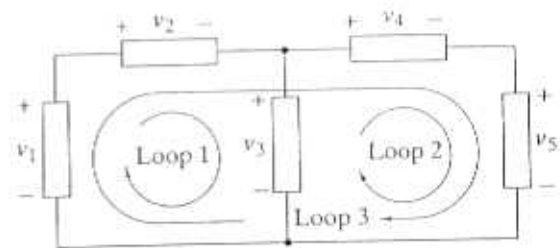


FIGURE 2-21 Circuit used to demonstrate combined

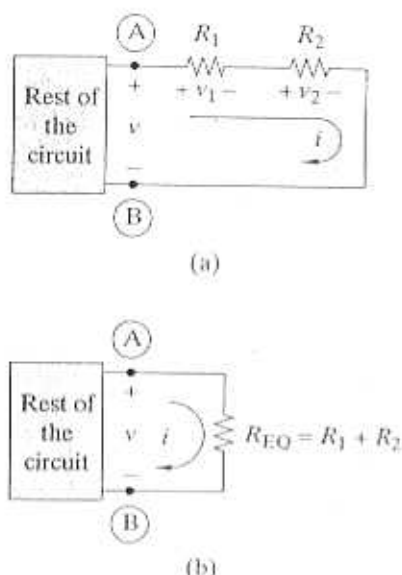


FIGURE 2-25 A series resistance circuit: (a) Original circuit. (b) Equivalent circuit.

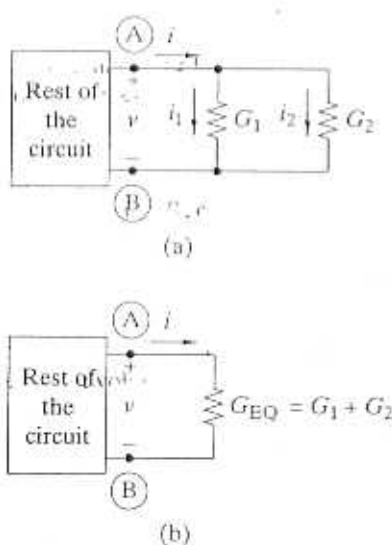
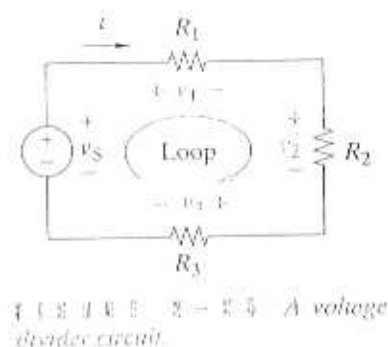


FIGURE 2-28 A parallel resistance circuit: (a) Original circuit. (b) Equivalent circuit.

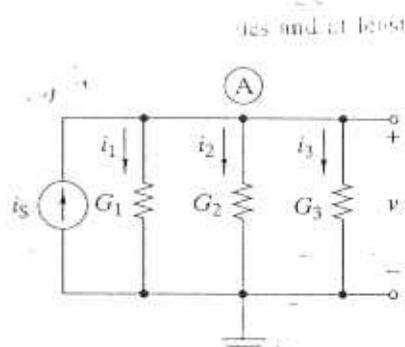


FIGURE 2-41 A current divider circuit.

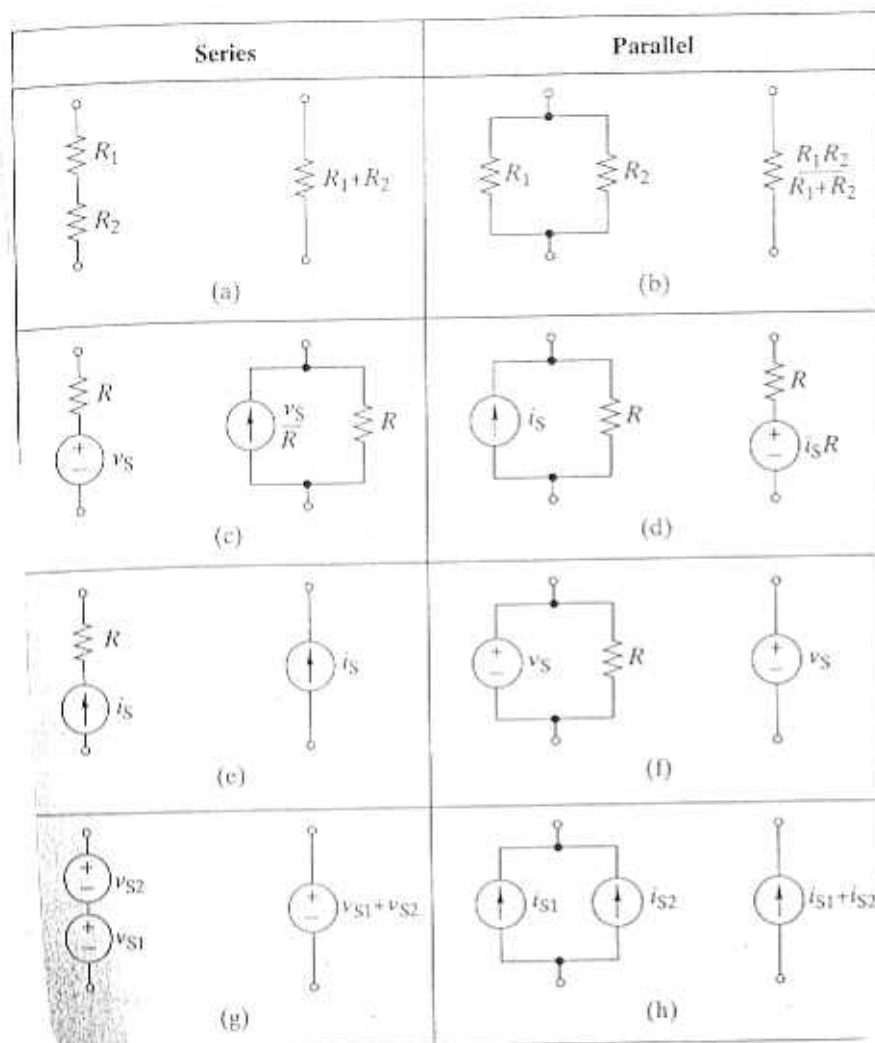
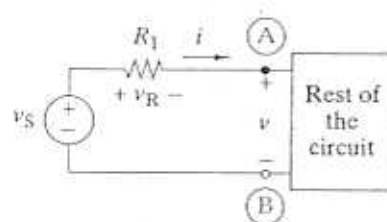
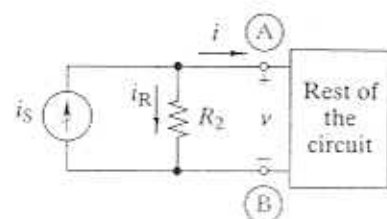


FIGURE 2-34 Summary of two-terminal equivalent circuits.



Circuit A



Circuit B

FIGURE 2-28 Practical source models that are equivalent when Eq. (2-24) is satisfied.

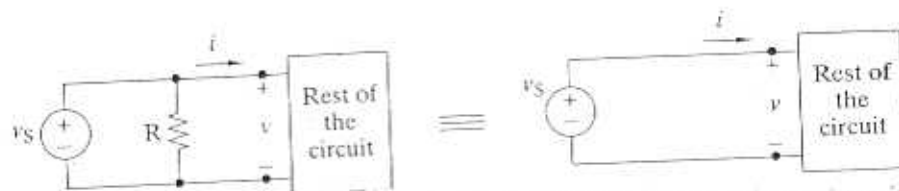


FIGURE 2-32 Equivalent circuit of a voltage source and a resistor in parallel.



FIGURE 2-33 Equivalent circuit of a current source and a resistor in series.

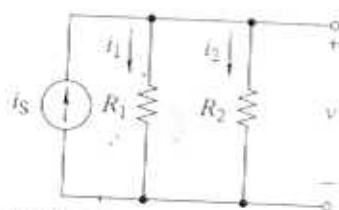
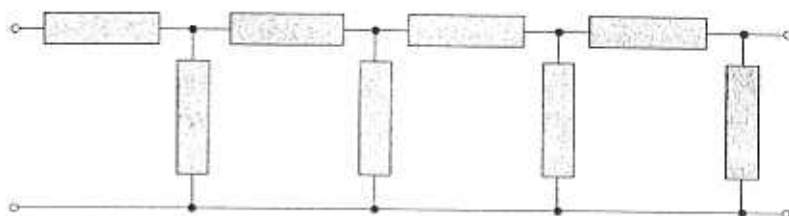


FIGURE 2-42 Two-path current divider circuit.

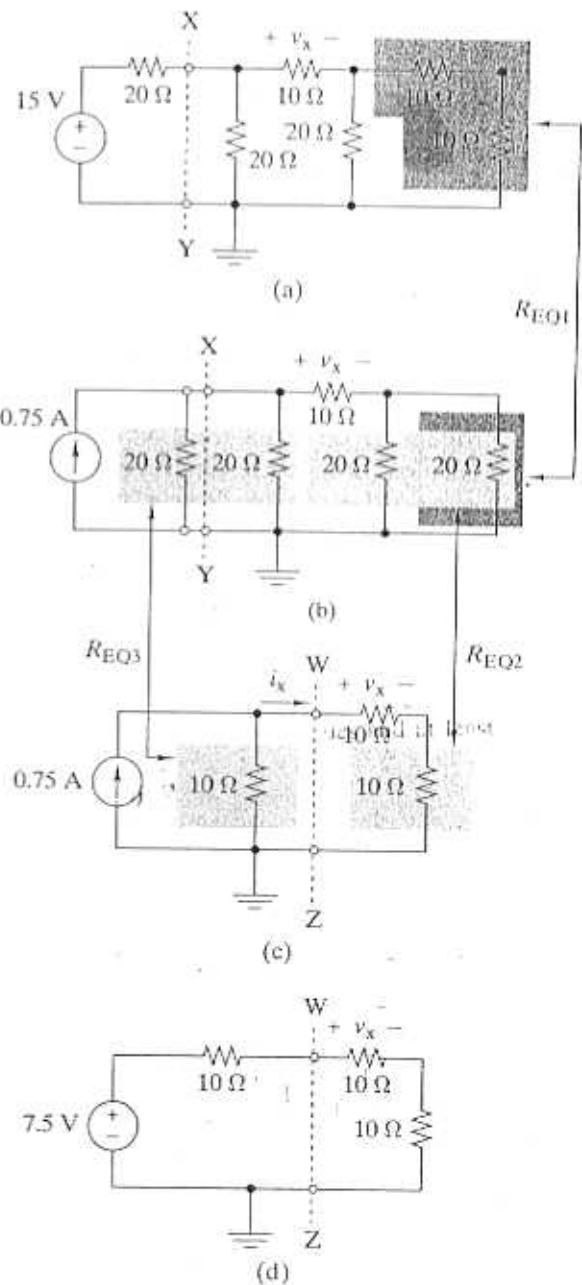
FIGURE 2-46 A ladder circuit.



EXAMPLE 2-22

Find v_x in the circuit shown in Figure 2-49(a).

FIGURE 2-49



Then, applying Ohm's law to obtain v_x ,

$$v_x = 10 \times i_x = 2.5\text{ V}$$