

REVIEW EXERCISES

Circle the letter of the correct answer to each question.

1. What is the basic power formula?

a. $P = \frac{I}{E}$

b. $P = \frac{E}{A}$

c. $P = IE.$

d. $P = EA.$

2. What is the unit of electrical power?

a. The ampere.

b. The gauss.

c. The volt.

d. The watt.

3. What symbol represents current?

a. R.

b. I.

c. P.

d. A.

4. What is the unit of electromotive force?

a. The coulomb.

b. The ampere.

c. The watt.

d. The volt.

5. What is the total resistance of the parallel circuit containing resistors of 10 Ω and 15 Ω ?

a. 6.

b. 10.

c. 14.

d. 18.

6. What is the electrical resistance formula?
- a. $R = \frac{W}{I}$
 - b. $R = \frac{I}{E}$
 - c. $R = \frac{E}{I}$
 - d. $R = \frac{I}{W}$
7. What is the total resistance of a parallel circuit containing five 40- Ω resistors?
- a. 8.
 - b. 16.
 - c. 32.
 - d. 64.
8. A circuit consumes 5 W of power from a potential of 50 V. What is the resistance, in Ω , of this circuit?
- a. 25.
 - b. 250.
 - c. 500.
 - d. 5,000.
9. What potential, in V, will cause .2 amps of current to flow through 1,000 Ω of resistance?
- a. 30.
 - b. 200.
 - c. 300.
 - d. 2,000.
10. What is the total resistance in Ω in figure 2-11?
- a. 40.
 - b. 70.
 - c. 100.
 - d. 130.

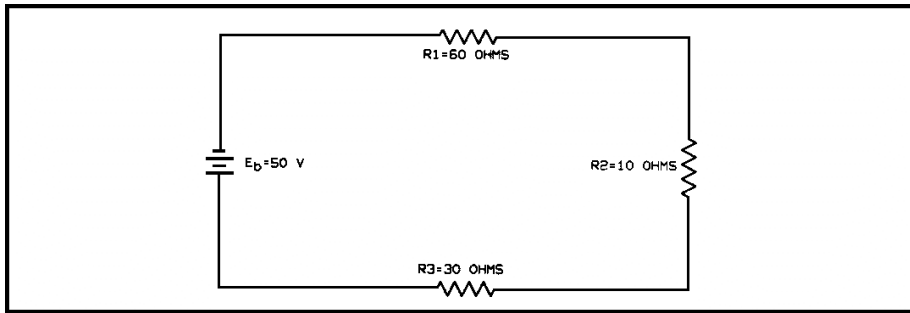


Figure 2-11.

11. How much current, in amps, will flow in the circuit in figure 2-11?
 - a. .05.
 - b. .5.
 - c. 5.
 - d. 50.

12. How much power in W, is consumed in the circuit in figure 2-11?
 - a. 2.5.
 - b. 5.5.
 - c. 25.
 - d. 55.

13. How many V are dropped across resistor R1 in figure 2-11?
 - a. 30.
 - b. 32.
 - c. 40.
 - d. 42.

14. How much power, in W, is dissipated across resistor R1 in figure 2-11?
 - a. 5.
 - b. 10.
 - c. 15.
 - d. 20.

15. How much power, in W, is dissipated across resistor R3 in figure 2-11?
 - a. 5.5.
 - b. 7.5.
 - c. 9.5.
 - d. 11.5.

16. What is the total resistance in Ω in figure 2-12?
- 2.5.
 - 5.
 - 7.5.
 - 10.
17. How many amps of current flow through resistor R1 in figure 2-12?
- .1.
 - 1.
 - 2.
 - 4.
18. How much power, in W, is dissipated across resistor R3 in figure 2-12?
- 10.
 - 20.
 - 30.
 - 40.
19. What is the total power, in W, consumed by the circuit in figure 2-12?
- 40.
 - 60.
 - 80.
 - 100.

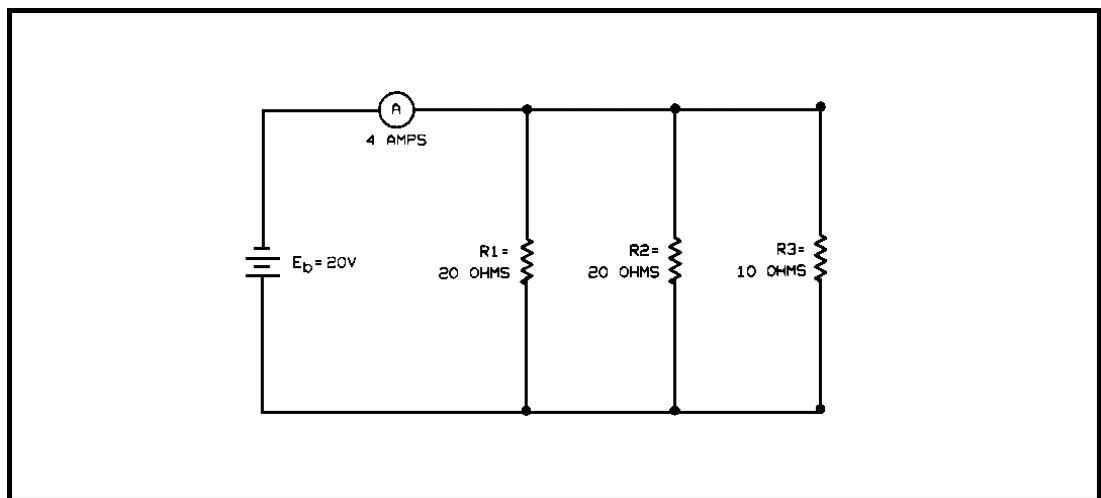


Figure 2-12.

20. What is the Ohms Law formula for computing current?

a. $I = \frac{E}{R}$

b. $I = \frac{R}{E}$

c. $I = \frac{E}{V}$

d. $I = \frac{V}{E}$

Recheck your answers to the Review Exercises. When you are satisfied that you have answered every question to the best of your ability, check your answers against the Exercise solutions. If you missed five or more questions, you should retake the entire lesson, paying particular attention to the areas in which your answers were incorrect.