Assignment 7

Due on 2020-10-16, 03:00 GMT

Week 7

1. A conductor of a wire with a length of 0.5 m has a resistance of 2 Ohms. Through how many joules of electrical energy is dissipated if a current of 2 A flows through it for 10 seconds?

2. A 100 W incandescent bulb has a filament of 0.5 mm diameter. The current flowing through the filament is 0.05 A. Determine the filament's resistance.

3. A 120 V power supply is delivering a current of 5 A to a circuit. Calculate the power dissipated in the circuit.

4. A 50 W light bulb is connected to a 120 V power supply. Determine the resistance of the light bulb.

5. A 10 kΩ resistor is connected to a 9 V battery. Determine the current flowing through the resistor.

6. A 2.0 V battery supplies a 0.5 A current to a circuit. Calculate the power dissipated in the circuit.

7. A 100 W incandescent bulb has a filament of 0.5 mm diameter. The current flowing through the filament is 0.05 A. Determine the filament's resistance.

8. A 120 V power supply is delivering a current of 5 A to a circuit. Calculate the power dissipated in the circuit.

9. A 50 W light bulb is connected to a 120 V power supply. Determine the resistance of the light bulb.

10. A 10 kΩ resistor is connected to a 9 V battery. Determine the current flowing through the resistor.

11. A 2.0 V battery supplies a 0.5 A current to a circuit. Calculate the power dissipated in the circuit.

12. A 100 W incandescent bulb has a filament of 0.5 mm diameter. The current flowing through the filament is 0.05 A. Determine the filament's resistance.

13. A 120 V power supply is delivering a current of 5 A to a circuit. Calculate the power dissipated in the circuit.

14. A 50 W light bulb is connected to a 120 V power supply. Determine the resistance of the light bulb.

15. A 10 kΩ resistor is connected to a 9 V battery. Determine the current flowing through the resistor.

16. A 2.0 V battery supplies a 0.5 A current to a circuit. Calculate the power dissipated in the circuit.

17. A 100 W incandescent bulb has a filament of 0.5 mm diameter. The current flowing through the filament is 0.05 A. Determine the filament's resistance.

18. A 120 V power supply is delivering a current of 5 A to a circuit. Calculate the power dissipated in the circuit.

19. A 50 W light bulb is connected to a 120 V power supply. Determine the resistance of the light bulb.

20. A 10 kΩ resistor is connected to a 9 V battery. Determine the current flowing through the resistor.

21. A 2.0 V battery supplies a 0.5 A current to a circuit. Calculate the power dissipated in the circuit.

22. A 100 W incandescent bulb has a filament of 0.5 mm diameter. The current flowing through the filament is 0.05 A. Determine the filament's resistance.

23. A 120 V power supply is delivering a current of 5 A to a circuit. Calculate the power dissipated in the circuit.

24. A 50 W light bulb is connected to a 120 V power supply. Determine the resistance of the light bulb.

25. A 10 kΩ resistor is connected to a 9 V battery. Determine the current flowing through the resistor.

26. A 2.0 V battery supplies a 0.5 A current to a circuit. Calculate the power dissipated in the circuit.

27. A 100 W incandescent bulb has a filament of 0.5 mm diameter. The current flowing through the filament is 0.05 A. Determine the filament's resistance.

28. A 120 V power supply is delivering a current of 5 A to a circuit. Calculate the power dissipated in the circuit.

29. A 50 W light bulb is connected to a 120 V power supply. Determine the resistance of the light bulb.

30. A 10 kΩ resistor is connected to a 9 V battery. Determine the current flowing through the resistor.

31. A 2.0 V battery supplies a 0.5 A current to a circuit. Calculate the power dissipated in the circuit.