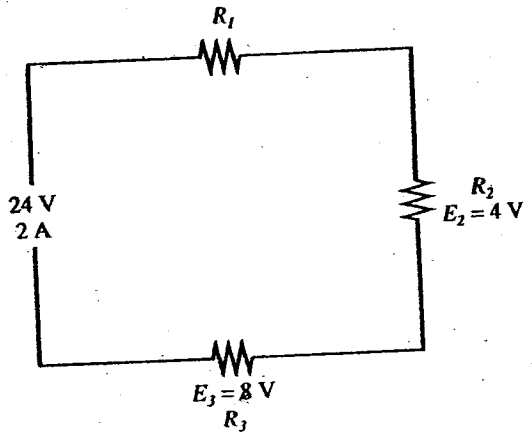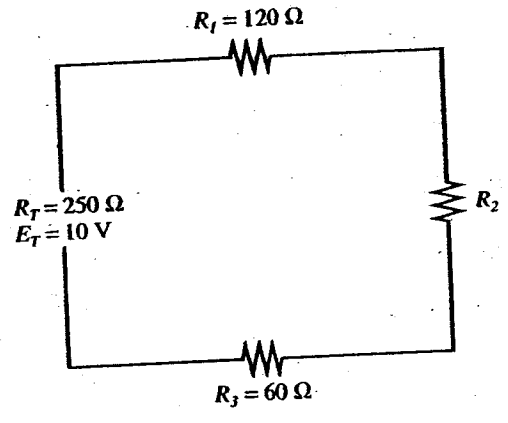## Practice Sheet 6-1

Name _____

Date _____

Answer questions 1–10 using the following series circuit.
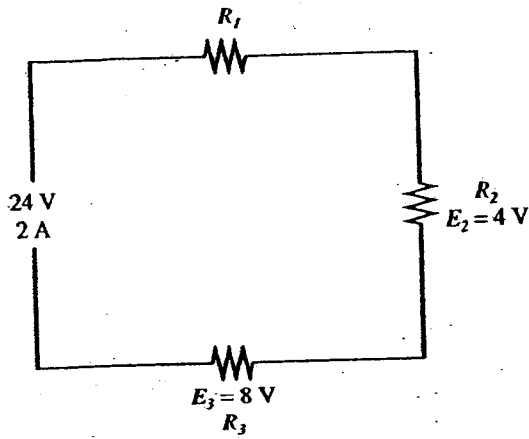

Answer questions 11–20 using the following circuit.

1. Total resistance = _____
2. Total current = _____
3. Current at R_1 = _____
4. Current at R_3 = _____
5. Voltage drop at R_1 = _____
6. Voltage drop at R_2 = _____
7. Voltage drop at R_3 = _____
8. Total power consumed by the circuit = _____
9. Power consumed at R_1 = _____
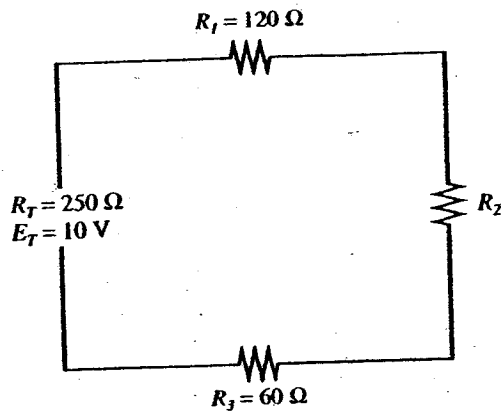10. Power consumed at R_2 = _____

11. Source voltage = _____
12. Total circuit resistance = _____
13. Current at R_1 = _____
14. Current at R_3 = _____
15. Resistance of R_1 = _____
16. Resistance of R_2 = _____
17. Resistance of R_3 = _____
18. Total power consumed by the circuit = _____
19. Power consumed at R_1 = _____
20. Power consumed at R_2 = _____

R_1

24 V
2 A

R_2
$E_2 = 4$ V

$E_3 = 8$ V
R_3

$R_1 = 120\ \Omega$

$R_T = 250\ \Omega$
$E_T = 10$ V

R_2

$R_3 = 60\ \Omega$

Voltage for $E_1 =$ _____
Total circuit resistance = _____
Current at $R_1 =$ _____
Resistance of $R_1 =$ _____
Current at $R_2 =$ _____
Resistance of $R_2 =$ _____
Current at $R_3 =$ _____
Resistance of $R_3 =$ _____
Total power consumed by the circuit = _____
Power consumed at $R_1 =$ _____

31. Total circuit current = _____
32. Current at $R_1 =$ _____
33. Voltage drop at $E_1 =$ _____
34. Current at $R_2 =$ _____
35. Resistance of $R_2 =$ _____
36. Voltage drop at $R_2 =$ _____
37. Current at $R_3 =$ _____
38. Voltage drop at $R_3 =$ _____
39. Total power consumed by the circuit = _____
40. Power consumed at $R_1 =$ _____