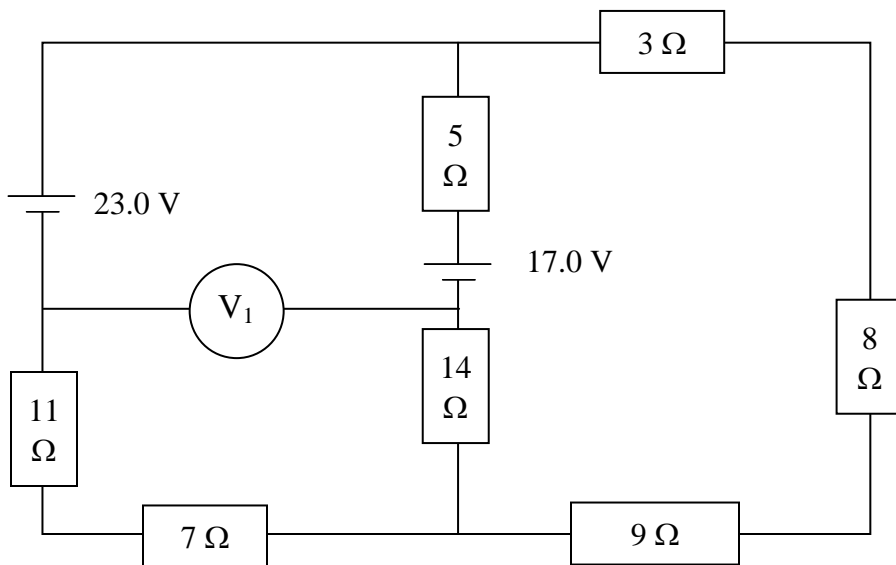


# Practice for 19.3 - Kirchhoff's Laws!!!!

1



Find the current and direction (up or down) through:

11 Ω \_\_\_\_\_ (0.515 A, up)

14 Ω \_\_\_\_\_ (0.172 A, up)

8 Ω \_\_\_\_\_ (0.687 A, down)

Find the voltage across:

7 Ω \_\_\_\_\_ (3.60 V)

3 Ω \_\_\_\_\_ (2.06 V)

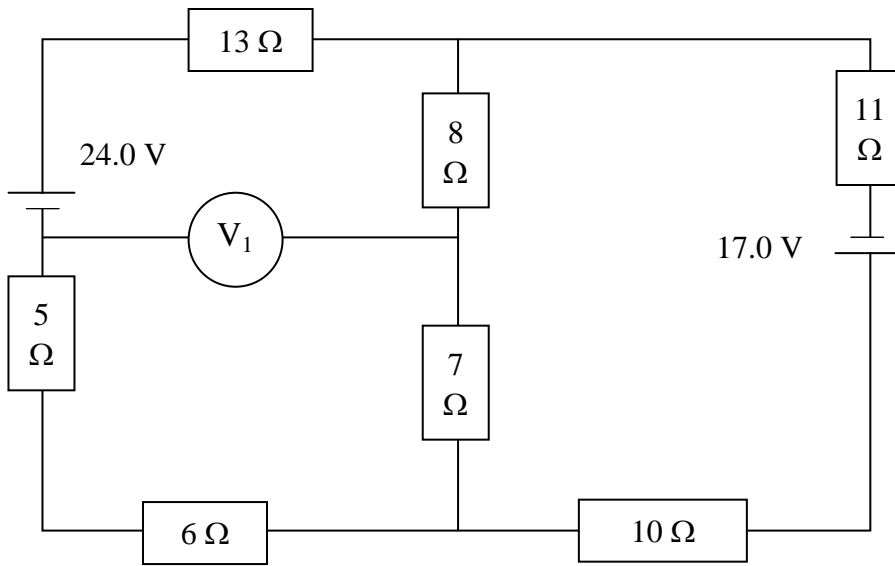
Find power dissipated by:

9 Ω \_\_\_\_\_ (4.24 W)

5 Ω \_\_\_\_\_ (0.148 W)

Find:

$|V_1| =$  \_\_\_\_\_ (6.86 V)



Find the current and direction (up or down) through:

5 Ω \_\_\_\_\_ (0.949 A, up)

7 Ω \_\_\_\_\_ (0.0814 A, down)

11 Ω \_\_\_\_\_ (0.868 A, down)

Find the voltage across:

13 Ω \_\_\_\_\_ (12.3 V)

10 Ω \_\_\_\_\_ (8.68 V)

Find power dissipated by:

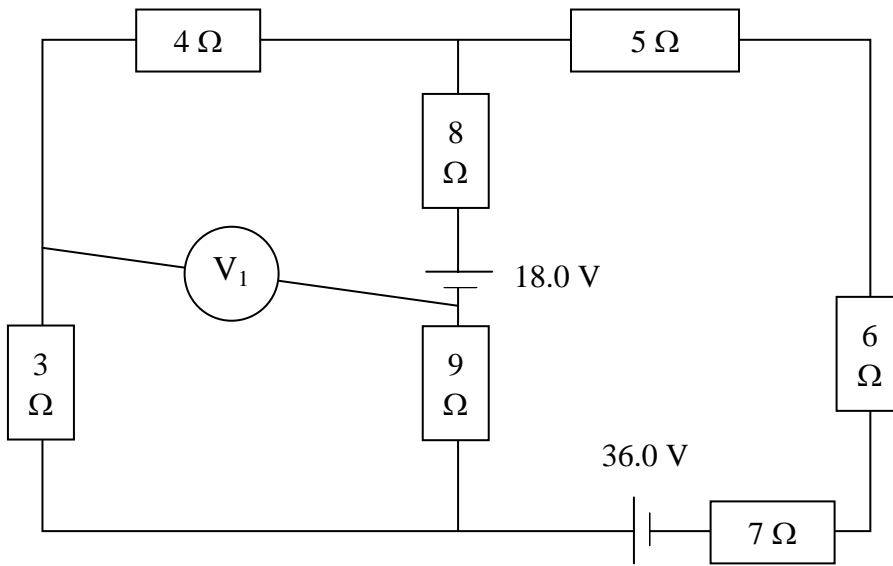
8 Ω \_\_\_\_\_ (0.0530 W)

6 Ω \_\_\_\_\_ (5.40 W)

Find:

$|V_1| =$  \_\_\_\_\_ (11.0 V)

3



Find the current and direction (up, down) through:

3 Ω \_\_\_\_\_ (0.523 A up)

9 Ω \_\_\_\_\_ (1.27 A up)

6 Ω \_\_\_\_\_ (1.80 A down)

Find the voltage across:

4 Ω \_\_\_\_\_ (2.09 V)

7 Ω \_\_\_\_\_ (12.6 V)

Find power dissipated by:

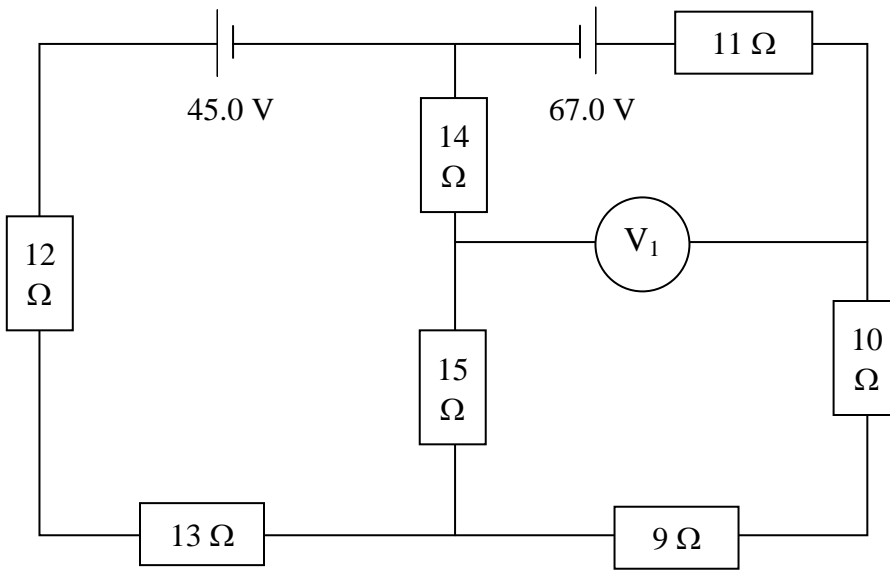
8 Ω \_\_\_\_\_ (13.0 W)

5 Ω \_\_\_\_\_ (16.1 W)

Find:

$|V_1| =$  \_\_\_\_\_ (9.90 V)

4



Find the current and direction (up, down, left, right) through:

12 Ω \_\_\_\_\_ (0.304 A down)

15 Ω \_\_\_\_\_ (1.29 A up)

10 Ω \_\_\_\_\_ (0.986 A down)

Find the voltage across:

11 Ω \_\_\_\_\_ (10.8 V)

14 Ω \_\_\_\_\_ (18.1 V)

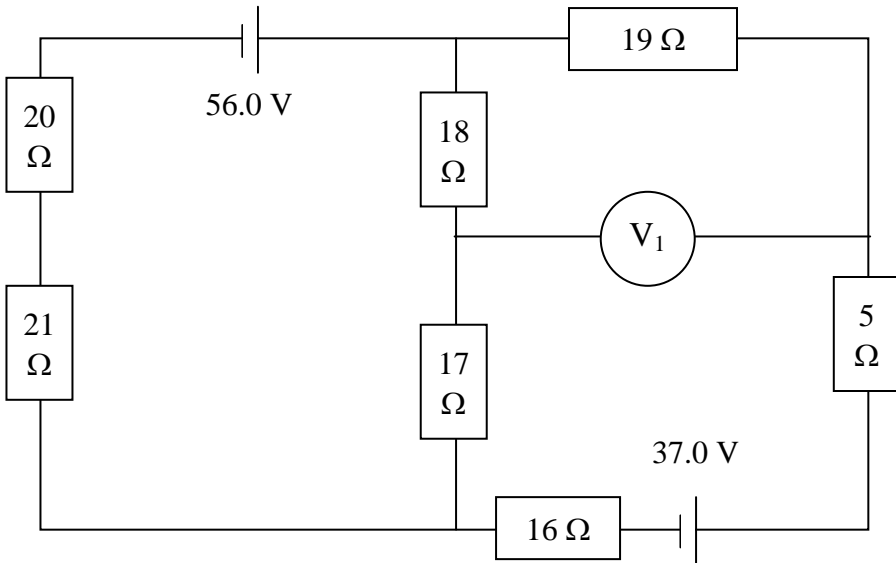
Find power dissipated by:

9 Ω \_\_\_\_\_ (8.76 W)

13 Ω \_\_\_\_\_ (1.20 W)

Find:

$|V_1| =$  \_\_\_\_\_ (38.1 V)



Find the current and direction (up, down, left, right) through:

$21 \Omega$  \_\_\_\_\_ (0.649 A, up)

$17 \Omega$  \_\_\_\_\_ (0.840 down)

$5 \Omega$  \_\_\_\_\_ (0.190 A, up)

Find the voltage across:

$20 \Omega$  \_\_\_\_\_ (13.0 V)

$19 \Omega$  \_\_\_\_\_ (3.62 V)

Find power dissipated by:

$16 \Omega$  \_\_\_\_\_ (0.580 W)

$18 \Omega$  \_\_\_\_\_ (12.7 W)

Find:

$|V_1| =$  \_\_\_\_\_ (18.7 V)