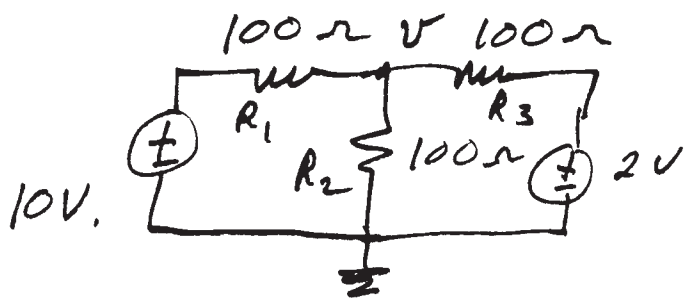


Pr4.4-1 Find the node voltage.



$$\frac{V-10}{100} + \frac{V-2}{100} + \frac{V}{100} = 0$$

$$V-10 + V-2 + V = 0$$

$$3V = 12$$

$$V = 4V$$

Power Analysis:

$$P_{R_1} = \frac{(V-10)^2}{R_1} = \frac{36}{100} = .36W$$

$$P_{R_2} = \frac{V^2}{R_2} = \frac{16}{100} = .16W$$

$$P_{R_3} = \frac{(V-2)^2}{R_3} = \frac{4}{100} = .04W$$

$$P_{\text{resistors}} = .56W$$

supplies

$I = \frac{10-4}{100} = .06A$
 $P_2 = 10(.06) = .6W$
 $I_2 = \frac{2-4}{100} = -.02$ $P_2 = 2(-.02) = -.04$
 why? ?

