

- 1.25** Two elements are connected in series, as shown in Fig. P1.25. Element 1 supplies 24 W of power. Is element 2 absorbing or supplying power, and how much?

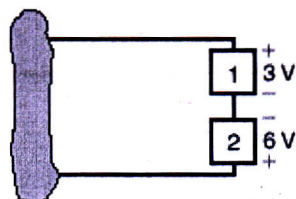


Figure P1.25

SOLUTION:

$$P_1 = 24 \text{ W}$$

$$I = \frac{P_1}{V_1} = \frac{24}{3}$$

$$I = 8 \text{ A}$$

$$P_2 = V_2 I = 6(8)$$

$$P_2 = 48 \text{ absorbed}$$