

1.31 Compute the power that is absorbed or supplied by the elements in the network in Fig. P1.31.

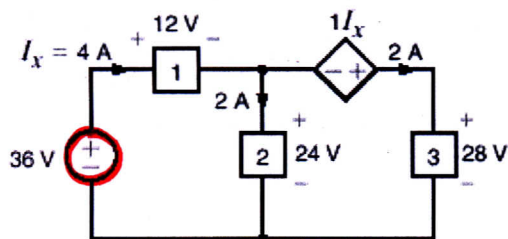


Figure P1.31

SOLUTION:

$$P_{36V} = -36(4) = -144 \text{ W}$$

$$P_{36V} = 144 \text{ W supplied}$$

$$P_1 = 12(4) = 48 \text{ W absorbed}$$

$$P_2 = 24(2) = 48 \text{ W absorbed}$$

$$P_{1/I_x} = (-I_x)(2) = -4(2) = -8 \text{ W}$$

$$P_{1/I_x} = 8 \text{ W supplied}$$

$$P_3 = 28(2) = 56 \text{ W absorbed}$$