

Electrical Circuit (1)

Introduction (week5 class2)

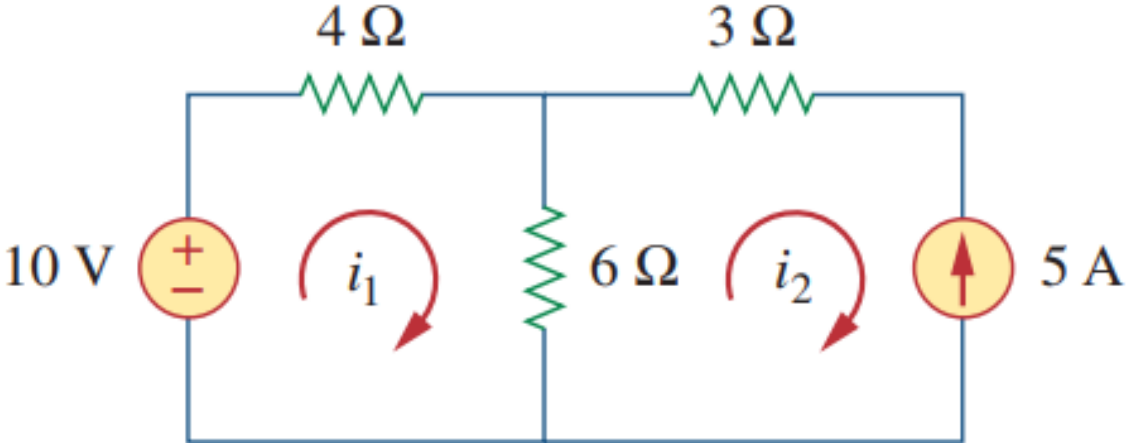
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Mesh Analysis with Current Sources

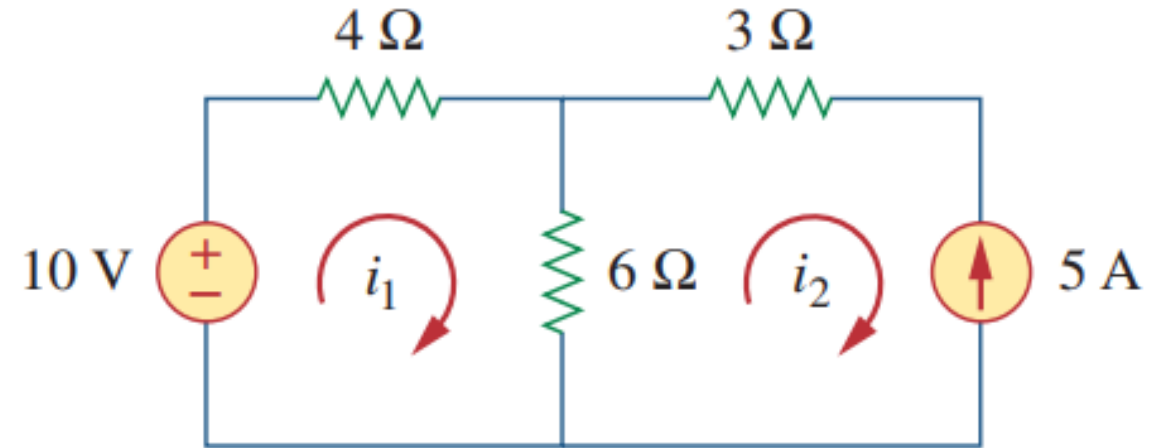


Mesh Analysis with Current Sources

Basic equation

$$-10 + (4 * i_1) + 6 * (i_1 - i_2) = 0$$

$$i_2 = -5$$

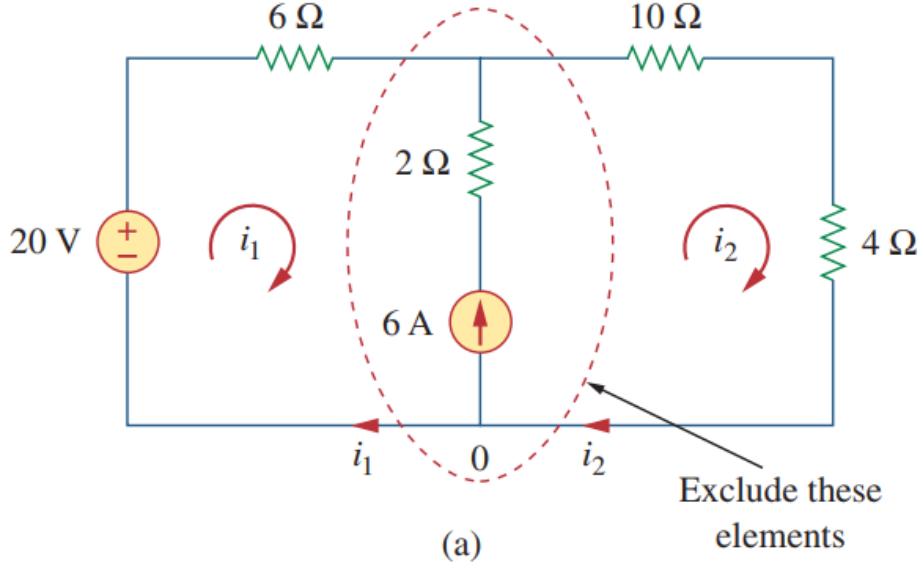


Final answer

$$i_1 = -2 \text{ A}$$

$$i_2 = -5 \text{ A}$$

Mesh Analysis with Current Sources



Mesh Analysis with Current Sources

Basic equation

$$i_1 + 6 = i_2$$

$$-20 + (6 * i_1) + (10 * i_2) + (4 * i_2) = 0$$

Formulated equation

$$i_1 - i_2 = -6$$

$$6i_1 + 14i_2 = 20$$

Final answer

$$i_1 = -3.2 \text{ A}$$

$$i_2 = 2.8 \text{ A}$$

