

Solutions

Each answer shows the steps, then the **result**.

2.1

- the sum of the potential differences around any closed loop is zero

2.2

- conservation of energy

2.3

- $10 = I(2.0 + 3.0) \Rightarrow I = 2.0 \text{ A}$

3.1 B

3.2 B

3.3

(a)

- $12 = I(3.0) + I(1.0)$

(b)

- $I = \frac{12}{4.0} = 3.0 \text{ A}$