

Solutions

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

2.1

- $P = IV = 3.0 \times 12 = 36 \text{ W}$

2.2

- $P = I^2R = (2.0)^2 \times 6.0 = 24 \text{ W}$

2.3

- $E = Pt = 60 \times 120 = 7200 \text{ J}$

3.1 A

3.2 B

3.3

(a)

- $I = \frac{V}{R} = \frac{240}{60} = 4.0 \text{ A}$

(b)

- $P = IV = 4.0 \times 240 = 960 \text{ W}$