

Solutions

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

2.1

- $P = \frac{W}{\Delta t} = \frac{9000}{6.0} = 1500 \text{ W}$

2.2

- $P = Fv = 800 \times 20 = 16\,000 \text{ W}$

2.3

- $W = P \Delta t = 60 \times 120 = 7200 \text{ J}$

3.1 B

3.2 A

- $P = Fv = 200 \times 0.50 = 100 \text{ W}$

3.3

(a)

- $W = mgh = 500 \times 10 \times 20 = 1.0 \times 10^5 \text{ J}$

(b)

- $P = \frac{1.0 \times 10^5}{10} = 1.0 \times 10^4 \text{ W}$