問8　P193

(1) $Q = IVt$ より

$Q = 1.2 \times 10 \times 30$

$= 360$

$= 3.6 \times 10^2$　　$\therefore 3.6 \times 10^2$ [J]

(2) $V = RI$ より

$I = \frac{V}{R}$

$I = \frac{20}{30} = \frac{2}{3}$ [A]

$Q = IVt$ より

$Q = \frac{2}{3} \times 20 \times 1.0 \times 60$

$= 800$

$= 8.0 \times 10^2$　　$\therefore 8.0 \times 10^2$ [J]

問9　P194

(1) $P = IV$ [W] より

$P = 3.0 \times 100 = 300$　　$\therefore 3.0 \times 10^2$ [W]

(2) $W = IVt$ [J] より

$W = 3.0 \times 100 \times 60 = 18000$

$\therefore 1.8 \times 10^4$ [J]

(3) $W = IV \cdot h$ [Wh] より

$W = 3.0 \times 100 \times 4$ [wh]

$= 1200$ [wh]

$= 1.2 \times 10^3$ [Wh]

$= 1.2$ [kWh]

$\therefore 1.2$ [kWh]

← k とは 1000 のこと。