

1

問 1

(1) $\sqrt{2gh}$

(2) $\frac{5}{2}a$

(3) $e\sqrt{2gh}$

(4) $\frac{5}{2e^{2n}}a$

問 2

(5) $\sqrt{2gh}$

(6) \sqrt{gh}

(6) (1)

(7) $\frac{1}{2}\sqrt{\frac{3h}{g}}$

(8) $\frac{7}{8}h$

(9) $\frac{\sqrt{3}+\sqrt{7}}{4}h$

2

問 1

| | | | |
|-----|---|-----|--|
| (1) | $p_0 + \frac{Mg}{S}$ | (2) | $\frac{RT_0}{p_1}$ |
| (3) | $\frac{3RT_0}{2N_A}$ | (4) | $\left(\frac{V_1}{V_A}\right)^{\frac{5}{3}} \cdot p_1$ |
| (5) | $\frac{3}{2} \left(\frac{V_1}{V_A}\right)^{\frac{2}{3}} RT_0$ | (6) | (イ) |

問 2

| | | | |
|-----|-----------------------|-----|---------------------------|
| (6) | $2p_1$ | (7) | (イ) |
| (7) | $\frac{1}{4} p_2 V_1$ | (8) | $E + \frac{1}{4} p_2 V_1$ |

3

問 1

| | | | |
|-----|---|-----|--|
| (1) | $\frac{Q^2 d}{2\epsilon_0 S}$ | (2) | $\frac{2\epsilon_0 S}{d}$ |
| (3) | $\frac{1}{2}$ | (4) | $\frac{2\epsilon\epsilon_0 S}{(\epsilon + \epsilon_0)d}$ |
| (5) | $\frac{\epsilon + \epsilon_0}{2\epsilon}$ | (6) | (I) |

問 2

| | | | |
|------|--------------------------|-----|-----------------------|
| (6) | $\frac{eV}{mL}$ | (7) | $\frac{eVT}{mL}$ |
| (8) | $enSw$ | (9) | $\frac{e^2 nST}{2mL}$ |
| (10) | $\frac{e^2 nSTV^2}{2mL}$ | | |