

الف) $y = x^2 + 4x + 5$ $4 - 1 = 3$ Ext

$\Delta = b^2 - 4ac$ $a > 0 \rightarrow \boxed{Max}$

$-\frac{b}{2a} = \frac{-4}{2} = -2$

$-\frac{\Delta}{4a} = \frac{16 - 20}{4} = -1$ $\boxed{\begin{matrix} -2 \\ -1 \end{matrix}}$

$y = -x^2 + 4x - 3$ $a < 0 \rightarrow \boxed{min}$ Ext $\boxed{\begin{matrix} 2 \\ 1 \end{matrix}}$

$-\frac{b}{2a} = \frac{-4}{-2} = 2$

$-\frac{\Delta}{4a} = \frac{16 - 12}{-4} = -1$

ب) $y = 0$ $4x - x^2 = 3$ $x = \boxed{1}$

$2x^2 + 3x + a = 0$ $\Delta = b^2 - 4ac = 9 - 8a$

الف) $\Delta > 0 \Rightarrow 9 - 8a > 0 \Rightarrow a < \frac{9}{8}$

ب) $\Delta = 0 \Rightarrow 9 - 8a = 0 \Rightarrow a = \frac{9}{8}$

ج) $\Delta < 0 \Rightarrow 9 - 8a < 0 \Rightarrow a > \frac{9}{8}$

$x^2 - 2x - 1 = 0 \Rightarrow (x+1)^2 - 2 = 0 \Rightarrow (x-1)^2 = 2 \Rightarrow (x-1) = \pm\sqrt{2}$

$x = 1 \pm \sqrt{2}$

$x^2 - x - 1 = 0 \Rightarrow (x - \frac{1}{2})^2 = \frac{5}{4} \Rightarrow (x - \frac{1}{2}) = \pm\frac{\sqrt{5}}{2}$

$x = \frac{1}{2} \pm \frac{\sqrt{5}}{2}$

الف) $x^2(x-1) = 0 \Rightarrow \Delta = b^2 - 4ac = 1 + 4 = 5$

$x = \frac{-b \pm \sqrt{\Delta}}{2a} = \frac{1 \pm \sqrt{5}}{2}$

ب) $x^2 + x - 4 = 0$

$\Delta = 1^2 - (4)(-1) = 17$

$x = \frac{-1 \pm \sqrt{17}}{2}$

$\frac{-1 - \sqrt{17}}{2}$ $\frac{-1 + \sqrt{17}}{2}$

$\begin{pmatrix} x & -x \\ x & -x \end{pmatrix} = 0$

$$\begin{array}{c} \cdot L \\ \left(\begin{array}{c} 2 \\ 1 \end{array} \right) \\ \left(\begin{array}{c} 2 \\ 1 \end{array} \right) \\ \parallel \\ \left(\begin{array}{c} 2 \\ 1 \end{array} \right) \end{array}$$

$$\begin{pmatrix} x & -y \\ x & -y \end{pmatrix} = 0$$

$$\begin{array}{l} \downarrow \\ \begin{array}{l} 1 \\ 0 \\ 2 \\ + \\ 1 \\ = 0 \end{array} \end{array}$$

(2) 1 2 3 4 5 6 7 8 9 10
 ↓
 (3) 1 2 3 4 5 6 7 8 9 10
 ↓
 (4) 1 2 3 4 5 6 7 8 9 10
 ↓
 (5) 1 2 3 4 5 6 7 8 9 10

$$ii) \quad r_{\alpha}^{\prime} - \partial_{\alpha} + \mu = 0 \quad \neq \Delta \psi / \delta$$

0 11 3 4 8 2 7 1.)

$\Delta \text{ value} \rightarrow c + a = b \rightarrow \textcircled{-1} \rightarrow -\frac{c}{5} = \textcircled{\frac{-1}{5}}$

$$\Delta = \gamma_{\Delta} - \gamma = \gamma_{\Delta} - \gamma_{\Delta} + 1 \rightarrow \Delta = \gamma_{\Delta} - \gamma = 1$$

2) $K_T^V \Delta V_T + q \rightarrow \Delta \dot{m}_B \Delta = K_T - 1 K_T < 0 \rightarrow \Delta < 0$

$\begin{matrix} \text{X} \\ \text{X} \\ \text{X} \end{matrix}$

$$\frac{1}{2} = \frac{1}{2} + \frac{1}{2}$$

$$1 \quad 2 \quad 3 \quad p_2 \quad -r_1 + s_2 \quad -r_1$$

$$ii) \quad \binom{v}{2} + \binom{q}{1} = r_1 + r_2 \binom{v}{2} = \frac{n!}{k!(n-k)!} = \binom{n}{k}$$

$$\frac{1}{2} \left(\frac{1}{2} \right) = \frac{1}{4}$$

$$= \frac{N k_B T}{r_1 v_{eff}} = \frac{N k_B T}{r_1 v} \left(\frac{\chi}{\chi - 1} \right)$$

2/2-2

2/27

rejoice, love,