

(۲۰)

$$y = -m^2 + b m + 12$$

$$y_s = V_{\max}$$

(۱)

$$-\frac{\Delta}{\epsilon a} \Rightarrow V \rightarrow \frac{b^2 + 12}{+ \epsilon} = V$$

$$b^2 + 12 = 28$$

$$b \leq 14$$

$$b \leq 7\epsilon$$

(۲)

$$\text{الف) } f(m) = m^2 + 12m + 12$$

(۲)

$$m^2 \rightarrow a$$

$$a^2 + 12a + 12$$

$$\Delta \leq b^2 - 4ac$$

$$\epsilon - 12 < 0$$

محدوده مقبول

$$\text{ب) } f(m) = (\epsilon - m^2)^2 - 2(\epsilon - m^2) - 10$$

(۲)

$$\epsilon - m^2 \leq t$$

$$t^2 - 2t - 10 = (t - 5)(t + 3)$$

$$t \leq 5 \rightarrow \epsilon - m^2 - 5 = 0$$

$$t \leq -3 \rightarrow \epsilon - m^2 + 3 = 0$$

$$m^2 \leq -1$$

$$m^2 = V$$

$$m \leq \sqrt{V}$$

$$\alpha, \alpha + 12$$

$$\epsilon m^2 - 14m + m = 0$$

(۲)

$$S = -\frac{b}{a} \rightarrow \alpha + \alpha + 12 = \frac{14}{\epsilon} \rightarrow 2\alpha + 12 \leq \epsilon$$

$$2\alpha \leq 12 \rightarrow \alpha \leq 6$$

$$\beta \leq 12$$

(۲)

$$P \leq \frac{c}{a} \rightarrow \frac{m}{\epsilon} \rightarrow 1 \times 12 \Rightarrow m \leq 12$$

$$\epsilon m^2 - 14m + 12 \leq 0$$

$$(14)^2 - (14 \times 12) \Rightarrow 4\epsilon \Delta > 0 \checkmark$$

$$1 \quad r m r - 4 a + m - 1 = 0 \quad m < p \quad (5)$$

$$2 \quad + r a - \beta = \epsilon \quad r a - \beta = \epsilon \rightarrow r a + r \beta - r \beta = \epsilon$$

$$3 \quad - \frac{b}{a} = + \frac{4}{r} = r \quad \epsilon \quad \underbrace{r(\alpha + \beta) - r\beta = \epsilon}_{r\beta = 0 \quad \beta = 0} \quad \boxed{\alpha = r}$$

$$4 \quad p = \frac{c}{a} = \frac{m-1}{r} = 0 \quad m-1 = 0 \quad \boxed{m=1} \quad (9)$$

$$5 \quad r m r - 4 m = 0 \quad \Delta > 0$$

$$6 \quad r^2 - 0 > 0 \rightarrow \checkmark$$

$$7 \quad - m r^2 + \epsilon m + m r - r = 0 \quad \alpha, \frac{1}{\alpha} \quad (5)$$

$$8 \quad p < 1 \rightarrow \frac{c}{a} < 1 \quad \frac{m r - r}{-m} < 1 \quad m r + m + r = 0$$

$$9 \quad (m+r)(m-1) \quad (9)$$

$$10 \quad \Delta > 0 \quad \boxed{0 < m \leq 1} \rightarrow -m r^2 + \epsilon m - 1 = 0 \rightarrow \Delta > 0 \quad \checkmark$$

$$11 \quad 14 \epsilon = 14 > 0$$

$$12 \quad \boxed{0 < m \leq 1} \rightarrow + r m r - 4 a + r = 0 \rightarrow \Delta < 0 \quad \times$$

$$13 \quad 14 - 14 = 0$$

$$14$$

$$15 \quad \alpha, \beta \quad m r - m a + r = 0 \quad \alpha \beta r = \epsilon \quad (4)$$

$$16 \quad (9)$$

$$17 \quad p < \alpha \cdot \beta = \frac{c}{a} = r \quad \alpha \beta r = \epsilon \rightarrow \alpha \beta \times \beta = \epsilon \quad \beta = \frac{\epsilon}{r}$$

$$18 \quad r \times \frac{\epsilon}{r} \Rightarrow \frac{9}{\epsilon} = \alpha \quad \boxed{\frac{9}{\epsilon} = \alpha}$$

$$19 \quad \Rightarrow \alpha + \beta = -\frac{b}{a} \quad \frac{\epsilon}{r} + \frac{9}{\epsilon} = m \quad m \leq \frac{\epsilon r}{1 r}$$

$$20 \quad m r - \frac{\epsilon r}{1 r} m + r = 0 \quad \Delta > 0 \quad \boxed{0 < m \leq 1} \quad \checkmark \quad \left(\frac{\epsilon r}{1 r} \right)^2 - \left(\frac{1 r \times 1 r}{1 r} \right) > 0$$

$$M^r \varepsilon_m + m_{\varepsilon=0} \quad \alpha, \mu_d \text{ to } \beta, \mu_d$$

(V)

$$S = \alpha + \mu_d \Rightarrow \varepsilon \alpha = -\frac{b}{a} + \varepsilon \quad \alpha < 1 \quad \beta = \mu$$

$$M^r \varepsilon_m + \mu_{\varepsilon=0}$$

$$\rho = \frac{c}{a} = \alpha \beta \Rightarrow m = \mu$$

$$14 - 12 > 0 \quad \checkmark \checkmark \checkmark$$

$$\Delta > 0$$

$$\alpha^r + \frac{\Lambda}{\alpha^r} = p$$

$$M^r \varepsilon_m + \mu_{\varepsilon=0}$$

(A)

$$\alpha^r - V \alpha + \mu_{\varepsilon=0}$$

$$\alpha^r + \mu_{\varepsilon=0} V \alpha$$

$$\left(\alpha^r + \left(\frac{r}{\alpha} \right)^{\mu} \right) \left(\alpha^r + \frac{r}{\alpha} \right) \left(\alpha^r + \frac{r}{\alpha} - r \right)$$

$$\alpha^r + r \Rightarrow \frac{V \alpha}{d} = V$$

$$\frac{q \varepsilon + \varepsilon}{d^r} \rightarrow \frac{(\alpha^r + r) - \varepsilon \alpha^r}{d^r} \rightarrow \frac{\varepsilon \alpha^r}{\alpha^r}$$

$$(V) (\varepsilon \alpha - r) < \mu$$

$$a < 0 \quad \max \quad h(t) = -1.0t + 0.0t$$

(9)

$$y_s = -1.0 \left(\frac{r_0}{\varepsilon} \right) + d \left(\frac{0}{r} \right) = 4r, d$$

$$\max \varepsilon \omega_1$$

$$-1.0t^r + 0.0t$$

$$-\frac{\partial_0}{-r_0} \Rightarrow \frac{\partial}{r} = \mu_s$$

$$t(-1.0t + 0.0) =$$

$$t = 0 \times \boxed{t = \delta s}$$

(10)

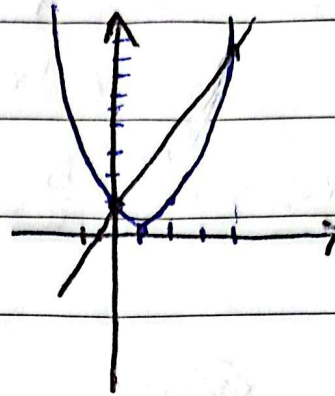
$$1) (n-1)P_n P_{n+1}$$

$$nP_n P_{n+1} = P_{n+1}$$

$$nP_n - \varepsilon n \leq 0$$

$$n(n-\varepsilon) \leq 0$$

$$n \leq 0, \varepsilon \quad \text{--- } 1, 2, 3, 4, 5, 6$$



(5)

$$2) nP_n P_{n-1} - n - P_n$$

$$nP_n P_{n-1} - n - P_n \leq 0$$

$$nP_n + n - P_n \leq 0 \quad n \leq P_n + 1$$

