

$$x_0 = 2 \rightarrow \frac{-1}{2(a-1)} = 2 \quad -\frac{1}{F} x^2 + x + 3 = 0$$

$$F a - 2 = -1$$

$$F a = 1$$

$$a = \frac{1}{F}$$

$$\Delta = 1 - 4 \left(-\frac{1}{F}\right)(3) = F$$

$$x_1 = \frac{-1+2}{2 \times -\frac{1}{F}} = -2F$$

$$x_2 = \frac{-1-2}{2 \times -\frac{1}{F}} = 3 \checkmark$$

$$\textcircled{1} \Delta > 0 \rightarrow 2a - \frac{F(m)(m)}{Fm^2} > 0$$

$$a^2 > \frac{Fm^2}{Fm^2} \rightarrow a > m \quad \underline{a > m}$$

$$\textcircled{2} a < 0 \text{ جبرل } \quad \underline{m < 0} \rightarrow \underline{a < m}$$

$$\alpha, \beta = \frac{(r+\sqrt{\Delta}) \times (r-\sqrt{\Delta})}{4} = \frac{4 - 4\sqrt{\Delta} + 4\sqrt{\Delta} - \Delta}{4} = \frac{F}{4}$$

$$\alpha + \beta \rightarrow \frac{c+\sqrt{\Delta} + c-\sqrt{\Delta}}{2} = r$$

$$\underline{y = 4x^2 - 12x + 4}$$

$$\alpha < \beta \quad m = ?$$

~~Handwritten scribbles and crossed-out text.~~

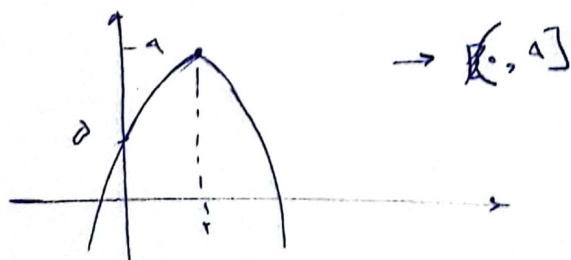
$$\Delta = F\lambda - \lambda m = 4$$

$$\frac{2(\lambda - \sqrt{4})}{F} + \frac{\lambda + \sqrt{4}}{F} = 12$$

$$F\lambda - \lambda m = 4$$

$$-\lambda m = 12$$

$$F\lambda = 22 - 2\sqrt{4} \quad (\sqrt{4} \times (-\lambda))^2 \quad \underline{m = -2}$$



$$\frac{\alpha + \beta}{\alpha + \beta} = \frac{\frac{\sqrt{\alpha}}{\sqrt{\beta}}}{\frac{\sqrt{\beta}}{\sqrt{\alpha}}} = \frac{\sqrt{\alpha}}{\sqrt{\beta}}$$

$$\alpha + \beta = ? \rightarrow m = ?$$

$$\alpha^r - m\beta = \Lambda$$

$$\alpha^r - (\alpha + \beta)\beta$$

$$\alpha^r - (k + \beta) + \beta^r$$

$$-\sqrt{m^r + \Lambda m}$$

$$(\alpha - \beta)(\alpha + \beta)$$

$$m\sqrt{m^r + \Lambda m} + \sqrt{m} = \Lambda$$

$$\alpha^r - \beta^r - (\alpha + \beta) = \Lambda$$

$$m = -2$$

$$m = ?$$

$$m^r - \sqrt{m} - \Lambda = 0 \rightarrow \Delta = 14$$

$$y_s = -\frac{\Delta}{ka} = \Lambda \rightarrow \frac{m^r + \sqrt{m} - \Lambda}{\sqrt{m}} = \Lambda$$

$$m_1 = \frac{-r}{k}$$

$$m_2 = \frac{r}{k}$$

$$x_1 = \frac{-r + 4}{r(-r)}$$

$$x_2 = \frac{-r - 4}{r(-r)}$$

$$\frac{\Delta}{r}$$

$$f(x) = -rx^2 + rx + 4$$

$$-rx^2 + rx + 4 = 0$$

$$\Delta = 14 - r(-r)(4) = 4r$$

$$-Fa + b$$

$$x_s = \frac{b}{ka} = r$$

$$-c = r$$

$$-y_s = 4$$

$$f(x) = ax^2 + bx + c$$

$$Fa + \Lambda a + r = 0$$

$$Fa - \Lambda a = r$$

$$-Fa = r$$

$$a = -\frac{1}{r}$$

$$b = r$$

$$\frac{1}{a} + \frac{1}{b} = \frac{\alpha + \beta - r}{\alpha + \beta - \Lambda} = \frac{1}{r}$$

$$a = ?$$

$$2x^r - \Lambda x + 14 = 0$$

$$r = (Fa + r)r + (ra^r + 4a + r) = 0$$

$$\Delta = 14$$

$$r - \Lambda a - \Lambda + ra^r + 4a + r = 0$$

$$x_1 = \frac{\Lambda + r}{r}$$

$$x_2 = \frac{\Lambda - r}{r}$$

$$a = 1$$

$$ra^r - ra - 1 = 0$$

$$\Delta = 14$$

$$a_1 = \frac{r+r}{4} = 1, a_2 = \frac{r-r}{4}$$