

$\frac{-b}{2a} = 2$ $2a = -b$ $-1 - 4q - 1 = a - \frac{5}{2}$ $y = -\frac{1}{2}x^2 + x + 3$ $x = 1$ ✓
 $x = -2$

$25 - 4m^2 > 0$
 $25 > 4m^2$
 $m^2 < \frac{25}{4} \Rightarrow -\frac{5}{2} < m < \frac{5}{2}$ $m < 0$ $\Delta > 0$ $-\frac{5}{2} < m < 0$ ✓

$x^2 - 5x + p$
 $s = \frac{3+2}{2} = 2.5$

$p = \frac{9-5}{9} = \frac{4}{9}$

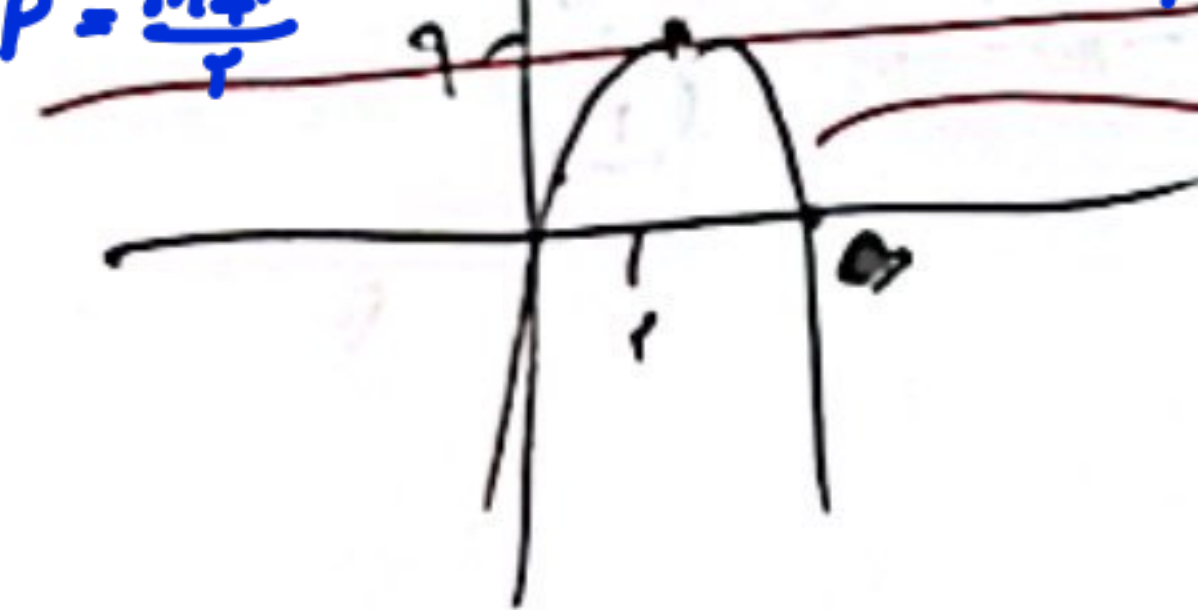
$x^2 - 2x + \frac{1}{9}$

$7x^2 - 11x + 4$ ✓

$2\alpha^2 + \alpha^2 + 2\beta^2 - \beta^2 = 12 \Rightarrow 2(\alpha^2 + \beta^2) + \alpha^2 - \beta^2 = 12$

$\frac{B > A}{\alpha - \beta < 0} \Rightarrow r(S - 2p) + (S) \left(\frac{-\Delta}{4a} \right) = 12$

$\frac{S = 4}{p = \frac{m+r}{2}} \Rightarrow 2(14 - m - r) - 4 \left(\frac{\sqrt{49 - 4m}}{2} \right) = 12 - 2m - 2\sqrt{49 - 4m} = 12 \Rightarrow 14 - 2m = 2\sqrt{49 - 4m} \Rightarrow m = 4$



0/0
 0/0

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

$\frac{-\Delta}{4a} = 9$ $4ac - b^2 = 36a$

$2 \cdot a - 14a^2 = 36a \Rightarrow -14a^2 = 14a \Rightarrow a = -1$
 $b = 4$ $a = -1$

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

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

$(-1, 5)$ ✓

$\frac{1}{\alpha} + \frac{1}{\beta} = \frac{\alpha + \beta}{\alpha\beta} = \frac{5}{p}$

$s = \frac{V}{\alpha}$
 $p = \frac{9\beta}{\alpha}$

$\frac{V}{\alpha} = \frac{V}{\beta} = \frac{V}{\alpha} = \frac{V}{\beta}$

$\alpha\beta^2 - V\beta + 9\beta = 0 \Rightarrow \alpha\beta^2 = -2\beta \Rightarrow \beta = -\frac{2}{\alpha} = \frac{2}{\alpha}$ ✓

$\alpha^2 - V\alpha - \frac{11}{\alpha} = 0 \Rightarrow \alpha^3 - V\alpha^2 - 11 = 0 \Rightarrow t^2 - vt - 11 = 0$
 $(t-9)(t+2) < \alpha^2 = 7$

$\frac{V}{\alpha} = \frac{V}{\beta} = \frac{V}{\alpha} = \frac{V}{\beta}$

$$\alpha^r + m\alpha - rm = 0 \rightarrow \alpha^r = rm - m\alpha$$

$$rm - m\alpha - m\beta = 1 \rightarrow rm - m(\alpha + \beta) = 1 \rightarrow rm + m^r = 1$$

$$\rightarrow \begin{cases} m = -r \rightarrow \Delta < 0 \quad \times \\ m = r \rightarrow \Delta > 0 \quad \checkmark \rightarrow S = -m = (-r) \end{cases}$$

$$\frac{-\Delta}{fa} = 1 \quad fac - b^r = r^2 a \Rightarrow rm^r + r^2 m - 14 = r^2 m \Rightarrow rm^r - 14 = fm \Rightarrow rm^r - fm - 14 = 0 \quad (r)$$

$$m^r - fm - 14 = 0 \Rightarrow \left(\begin{matrix} \textcircled{f} \times \\ m - f \end{matrix} \right) \left(\begin{matrix} \textcircled{-r} \checkmark \\ m + r \end{matrix} \right)$$

$a < 0 \rightarrow$ منحنى m و r :

$$f(x) = -rm^r + fx + 4 \rightarrow \begin{cases} x = r = 10 \checkmark \\ x = -1 \end{cases}$$

$$\frac{1}{\alpha} + \frac{1}{\beta} = \frac{5}{p}$$

$$\begin{matrix} s = r \\ p = -1 \end{matrix}$$

$$\boxed{\frac{f}{-a} = -\frac{1}{r}} \checkmark \quad (r)$$

$$\frac{fac - b^r}{ra} = 4 \Rightarrow \frac{fac - b^r}{ra} = 4 \Rightarrow \frac{fac - b^r}{ra} = 4$$

$$-fb - b^r = -4b \Rightarrow rb = b^r \Rightarrow b = r, a = -\frac{1}{r}, c = f$$

$$\frac{-b}{ra} = r \Rightarrow -b = fa$$

$$f(x) = -\frac{1}{r}x^r + rx + f$$

$$ra^r - 14a - 1 + \frac{ra^r}{f} + 4a + r = 0 \Rightarrow ra^r - 14a - 1 = 0 \begin{cases} a = 1 \Rightarrow x^r - 14x + 12 = 0 \quad (m^r - r)(m^r - r) = \textcircled{f} \checkmark \\ a = -\frac{1}{r} \Rightarrow x^r - \frac{1}{f}x + \frac{f}{r} = 0 \quad \left(m^r - \frac{r}{f}\right)(m^r - r) = \left(\frac{r}{f}\right) \checkmark \end{cases} \quad (r)$$