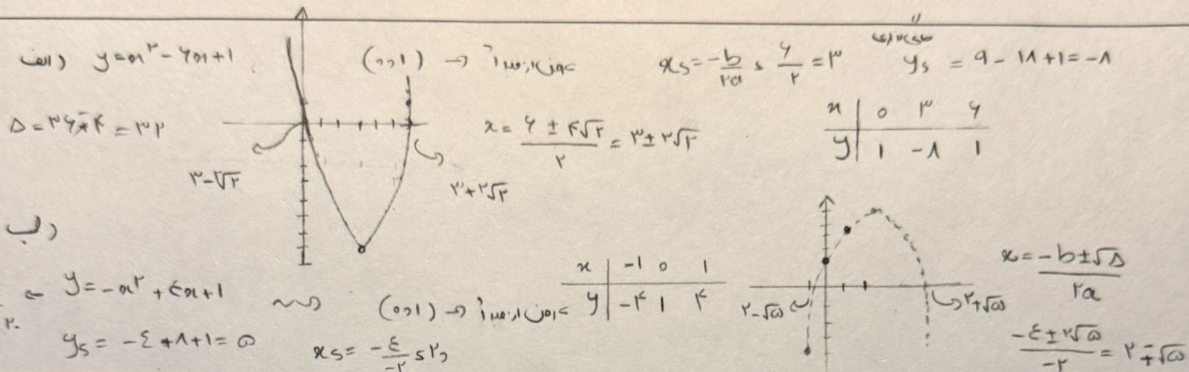
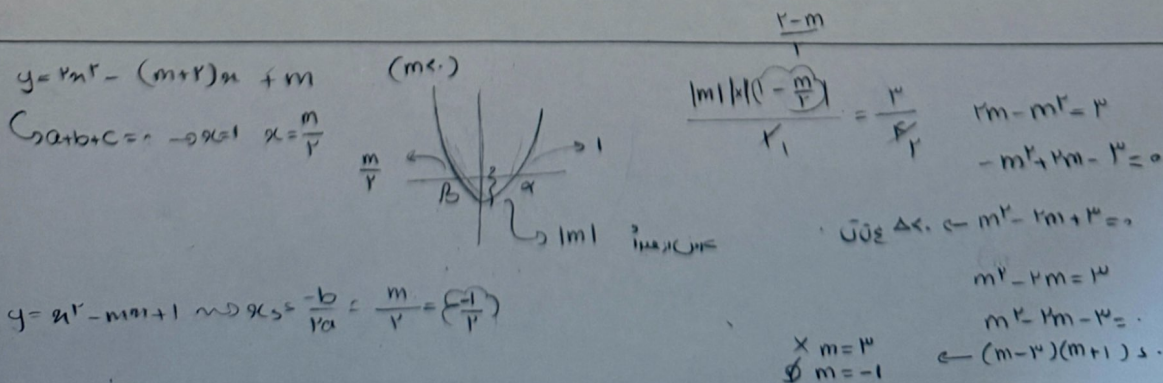


الف) $y = 2x^2 - 5x + 1$ $\rightarrow a > 0 \rightarrow$ min دارد $x_s = \frac{-b}{2a} = \frac{5}{4} = 1$ $y_s = 2 - 5 + 1 = -1$ Min $\left| \frac{1}{-1} \right|$
 $\Delta = b^2 - 4ac = 25 - 4(2)(1) = 9 - 8 = 1$
 ب) $y = -2x^2 + 4x - 5$ $\rightarrow a < 0 \rightarrow$ max دارد $x_s = \frac{-b}{2a} = \frac{4}{-4} = -1$ $y_s = \frac{-\Delta}{4a} = \frac{-1}{-4} = \frac{1}{4}$ Max $\left| \frac{1}{-1} \right|$



$2x^2 + kx - 9x - 2 = 0$
 $x + B = 1$
 $x + B = -2$
 $\Rightarrow y = x^2 - 5x + 2 = (x-2)(x-1)$
 $x = 2, x = 1$
 $2x^2 + kx - 9x - 2 = 0 \rightarrow k = -13$
 $2x^2 + kx - 11x - 2 = 0 \rightarrow k = -13$

$x^2 - 2mx + m = 0$ $S = \frac{1}{1} \left(\frac{-b}{a} \right) P = m \left(\frac{c}{a} \right)$
 $\sqrt{a} - \sqrt{b} = 1 \rightarrow \alpha + \beta - \sqrt{\alpha\beta} = 1 \rightarrow 1 - 2\sqrt{m} = 1 \rightarrow \sqrt{m} = 0 \rightarrow m = 0$
 $\sqrt{m} = 1 \rightarrow m = 1$
 $2x^2 - mx - m = 0 \rightarrow P = \frac{c}{a} = \frac{-m}{2} = -\frac{1}{2}$



$$y = a^n + r^n + a$$

$$y_s = \frac{v}{\lambda}$$

$$\Delta = 9 - 8a^2$$

$$y_s = \frac{-D}{ka} = \frac{ka^2 - 9}{ka} = \frac{v}{\lambda}$$

$$r^2 a^2 - vr = r^2 a$$

$$\hookrightarrow r^2 a^2 - r^2 a - vr = 0 \rightarrow a = \frac{v}{\lambda}$$

$$\hookrightarrow r^2 a^2 - va - 9 = 0$$

$$a + b + c = \dots \quad a = 1 - \frac{9}{14} = \frac{5}{14}$$

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$$y = x^n - (a+1)^n + a \rightarrow a+b+c = \dots \text{ من المعطيات: } 1, a \text{ من } a=3$$

$$y = x^n - (r^2 a + 1)^n + b \text{ من } y = x^n - 10x + b$$

$$b = r^2$$

$$\rightarrow y = x^n - 10x + r^2$$

$$y = (x-7)^{n-1} \text{ من } x=7, x=r^2$$

$$\text{من المعطيات } r = \frac{\sqrt{\Delta}}{2a} = r \rightarrow \sqrt{1-8b} = r$$

$$1-8b = r^2$$

$$r^2 b = r^2$$

$$b = r^2$$

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$$\text{من المعطيات } 1 \times 3 = 3$$

$$\text{من المعطيات } 4 \times 2 = 8$$

$$11 = 11$$

$$y = -an^r + an + r$$

$$\text{من } x_s = \frac{-b}{ka} = \frac{ra}{ra} = \frac{1}{r}$$

$$y_s = -\frac{a}{r} + \frac{ra}{r} + r = \frac{a}{r} + r$$

$$y = rbn^r - bn - 1$$

$$\text{من } x_s = \frac{+b}{kb} = \frac{+1}{r}$$

$$y_s = \frac{b}{r} - \frac{rb}{r} - 1 = -\frac{b}{r} - 1$$

$$\hookrightarrow x = \frac{1}{r}$$

$$\frac{b}{r} - \frac{b}{r} - 1 = \frac{a}{r} + r \text{ من } \frac{a}{r} = -r \text{ من } a = -r^2$$

$$r^2 + r = 4$$

$$\rightarrow x = \frac{+1}{r} \text{ من } \left(\frac{11}{14} - \frac{11}{14} + r = -\frac{b}{r} - 1 \right) \times 14 \rightarrow 11 - 11 + 14r = -14 - 14$$

$$b - a = -4(-11) = 44 \rightarrow b = -4$$

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$$y = r a x^n + \epsilon n + \beta$$

$$B > \alpha$$

$$\frac{\beta}{ra} = a \cdot \beta \text{ من } r a x^n = 1 \rightarrow a = \frac{1}{\omega}$$

$$\hookrightarrow a = \frac{1}{\omega} \text{ من } \omega x^n + \epsilon n + \beta \text{ من } S = \frac{b}{a} = \frac{-\epsilon}{\omega} \text{ من } a + \beta = \frac{1}{\omega} + \beta = \frac{1}{\omega}$$

$$B > \alpha \text{ من } \dots \rightarrow \beta = -1 \text{ من } \omega = 9$$

$$\Delta = r^2 + r = r^2$$

$$\rightarrow a = -\frac{1}{\omega} \text{ من } -\omega x^n + \epsilon n + \beta \text{ من } S = \frac{16}{10} = \frac{1}{\omega} + \beta \rightarrow \beta = 1$$

$$\beta = 1, \alpha = \frac{1}{\omega}$$

$$\rightarrow -\omega x^n + \epsilon n + 1 \text{ من } x_s = \frac{-b}{ka} = \frac{-r}{-r} = \frac{1}{\omega} \quad y_s = \frac{-\Delta}{\epsilon a} = \frac{r^2}{10} = \frac{11}{10} = \frac{9}{\omega}$$

$$y_s = \dots \text{ من } \dots$$

$$y = x^n - (a+b^r - 1)r^n + a + b - 1 = 0$$

$$y = x^n - Sx + P \rightarrow S a^r + b^r - 1r = a + b \text{ من } a^r + b^r = a + b + 1r = ab + 1r$$

$$P a b = a + b - 1$$

$$a + b = ab + 1 \rightarrow a^r + b^r + P a b = a b^r + 1 + P a b$$

$$ab + 1 = a + b \text{ من } (ab = r)$$

$$\epsilon + 1 = a + b \text{ من } (a + b = \omega)$$

$$r^2 a b + 1r - a^r b^r - 1 a b - 1 = 0$$

$$-a^r b^r + a b + 1r = 0 \text{ من } a^r b^r - a b - 1r = 0$$

$$(ab) = t = r^2$$

$$\dots \text{ من المعطيات } t = r$$

$$\text{من المعطيات } t = 1$$

$$t^r - t - 1r = \dots$$

$$\left((t-1)(t+1) \right) = \dots$$

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