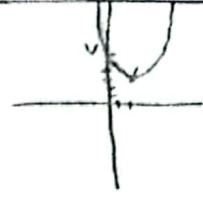


یا (میر) میر
کلیف ۱۲

امیر محمد فوجانی

الف) $y = x^2 - 2x + 7 - \frac{6}{x} = -\frac{(-8)}{x(-1)} = 2 \rightarrow x^2 - 2x + 7 - \frac{6}{x} = 2$
 ب) $y = -x^2 + 4x - 1, -\frac{6}{x} = -\frac{8}{x(-1)} = 2 \rightarrow -x^2 + 4x - 1 = 2$



$2m^2 + (m+1)m + \frac{1}{4}m + 2 = 0$
 الف) $\Delta > 0 \rightarrow (m+1)^2 - 4(2)(\frac{1}{4}m+2) > 0 \rightarrow m^2 - 2m - 10 \rightarrow (m-5)(m+2) > 0 \rightarrow \frac{m}{+1-1+} \rightarrow m > 5 \text{ or } m < -2$
 ب) $\Delta = 0 \rightarrow (m+1)^2 - 4(2)(\frac{1}{4}m+2) = 0 \rightarrow m^2 - 2m - 10 \rightarrow (m-5)(m+2) = 0 \rightarrow m = 5 \text{ or } m = -2$
 ج) $\Delta < 0 \rightarrow (m+1)^2 - 4(2)(\frac{1}{4}m+2) < 0 \rightarrow m^2 - 2m - 10 \rightarrow (m-5)(m+2) < 0 \rightarrow \frac{m}{+1-1+} \rightarrow -2 < m < 5$
 د) $\Delta \geq 0 \rightarrow (m+1)^2 - 4(2)(\frac{1}{4}m+2) \geq 0 \rightarrow m^2 - 2m - 10 \geq 0 \rightarrow (m-5)(m+2) \geq 0 \rightarrow \frac{m}{+1-1+} \rightarrow m \geq 5 \text{ or } m \leq -2$

$y = (m-2)x^2 - 2(m+1)x + 10$
 الف) $\frac{c}{a} > 0 \rightarrow \frac{10}{m-2} > 0 \rightarrow \frac{1}{-1+} \rightarrow m > 2$
 ب) $\frac{c}{a} < 0 \rightarrow \frac{10}{m-2} < 0 \rightarrow \frac{1}{-1+} \rightarrow m < 2$
 ج) $\Delta > 0 \rightarrow (-2m-2)^2 - 4(m-2)(10) > 0 \rightarrow 4m^2 + 8m - 80 > 0 \rightarrow m^2 + 2m - 20 > 0 \rightarrow (m+6)(m-4) > 0 \rightarrow m > 4 \text{ or } m < -6$
 د) $\Delta < 0 \rightarrow (-2m-2)^2 - 4(m-2)(10) < 0 \rightarrow 4m^2 + 8m - 80 < 0 \rightarrow m^2 + 2m - 20 < 0 \rightarrow (m+6)(m-4) < 0 \rightarrow -6 < m < 4$

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$\frac{2m^2}{x} - (2 \sin a)x + \frac{1}{x} = 0 \rightarrow \Delta > 0 \rightarrow (-2 \sin a)^2 - 4(\frac{1}{x})(\frac{2m^2}{x}) > 0 \rightarrow 4 \sin^2 a - \frac{8m^2}{x^2} > 0 \rightarrow \sin^2 a > \frac{2m^2}{x^2} \rightarrow \sin a > \frac{\sqrt{2}m}{x} \text{ or } \sin a < -\frac{\sqrt{2}m}{x}$
 $\sin a = \pm 1$

$y = (2m^2 - 2m - 1)(2m^2 - 2m - 1) \rightarrow y = (2m^2 - 2m - 1)^2$
 $- \frac{b}{2a} = \frac{-(-2m-1)}{2(2m^2-2m-1)} = \frac{2m+1}{4m^2-4m-2}$

$$m \cdot n^2 - (m+1)n - 2 = 0 \quad a^2 + 2a - 3 = 2 - 2p$$

$$x - \frac{b}{a} = \frac{d}{a} + v \rightarrow \frac{2(m+1)}{m} = \frac{d}{m} + v \rightarrow \frac{2m+2}{m} = \frac{d}{m} + v \rightarrow \frac{2m+2}{m} = \frac{10}{m} + v \rightarrow 2m+2 = 10 + vm$$

$$\text{if } m=14 \rightarrow m=8$$

$$5^2 - 2p - (-\frac{b}{a})^2 - 2(\frac{c}{a}) \rightarrow (\frac{m+1}{m})^2 - 2(\frac{2}{m}) - (\frac{2}{5})^2 - 2(-\frac{1}{p}) \rightarrow \frac{25}{14} + \frac{14}{14} = \frac{39}{14} = \frac{13}{2}$$

$$u^2 - 8u + 2 = 0 \quad \frac{\Sigma a + B^0}{\delta B^2}$$

$$B^2 = aB = 2$$

$$B^2 = B \times B^2 \rightarrow B \times 2B \rightarrow 2B^2 \rightarrow 2$$

$$B^3 = B \times B^2 = 2B$$

$$B^0 = B^2 \times B \rightarrow 2B$$

$$S = 0$$

$$P = 2$$

$$\Sigma a + B^2 = 2a + 2B \rightarrow 2(a+B) = 20$$

$$\frac{20}{2} = 10$$

$$J = a_n^2 + b_n + c \quad y_n = n+1 \quad \begin{matrix} +2 \\ -2 \end{matrix}$$

$$c = 2$$

$$a_n^2 + b_n + c = n+1 \rightarrow \Sigma a - 2b + c = -2 \rightarrow \Sigma a - 2b = -4$$

$$2 \equiv 2(2/1) \pm 1/2 \quad y_n = 2(-2) + 1 = -3 \rightarrow \begin{matrix} 2 \\ -2 \end{matrix} \quad \begin{matrix} 1 \\ -1 \end{matrix} \rightarrow 2(2) + 2(1) + c = 12$$

$$a(-2^2) + b(-2) + c = -3 \rightarrow 4a - 2b + c = -3 \quad c = 2(2) + 1 = 5$$

$$\Sigma a + 2b + 10 = 12 \rightarrow \Sigma a + 2b = 2 \rightarrow 2a + b = 1 \quad 4a - 2b + 1 = -3 \rightarrow 4a - 2b = -4 \rightarrow 2a - b = -2$$

$$\begin{cases} 2a - b = -2 \\ 2a + b = 2 \end{cases} \rightarrow \begin{matrix} 2a - b = -2 \\ 2a + b = 2 \end{matrix} \rightarrow \begin{matrix} 0 \\ 2b \end{matrix} = \begin{matrix} -4 \\ 4 \end{matrix} \rightarrow \begin{matrix} b = -2 \\ b = 2 \end{matrix}$$

$$y = n$$

$$y = n^2 + (n+1)n + m + 2 = n \rightarrow n^2 + (n+1)n + m + 2 - n = 0 \rightarrow n^2 + mn + m + 2 = 0$$

$$\Delta = 0 \rightarrow m^2 - 2(n)(m+2) = 0 \rightarrow m^2 - 2nm - 4n = 0 \rightarrow (m-2n)(m+2n) = 0$$

$$-2n \quad 2n$$