

$$x^2 - ax + b$$

$$\begin{array}{c} + \quad - \\ \hline + \quad - \end{array}$$

$$1(x-1)(x-c)$$

$$x^2 - 4x + 3 \rightarrow \begin{cases} a=4 \\ b=3 \end{cases} \rightarrow a+b \rightarrow 4+3=7$$

$$y = ((k-2)x + m - 1)(x - 3n)^2 \rightarrow \frac{-1}{+ \quad -} \frac{k}{+ \quad -} \xrightarrow{\text{شبه ضابطه}} \frac{-1}{+ \quad -} \frac{k}{+ \quad -} \rightarrow (x - 3n)^2 \rightarrow -1 - 3n = 0 \rightarrow n = -\frac{1}{3}$$

نویس x^2 طبق جدول مشخص کرده دلی
 صریح $(x+1)^2$ نویس x^2 همواره
 + بوده پس

$$k-2 \neq 0 \xrightarrow{k \in \mathbb{N}} k=1 \mid \begin{cases} x=1 \rightarrow -1 + m - 1 = 0 \rightarrow m = 2 \\ \frac{m}{1} + k = \frac{2}{1} + 1 = 3 \end{cases}$$

$$-\frac{1}{+ \quad -} \frac{b}{+ \quad -} \rightarrow (a \neq b) = (-1 \neq b) \rightarrow b - (-1) = c$$

$$f(x) = x^3 - 2x^2 - x + 3 \xrightarrow{\text{مجموعه ضابطه}} (x-1)(x^2 - x - 3) = \frac{(x-1)(x-3)(x+1)}{1 \quad 1 \quad -1}$$

$$-\frac{1}{+ \quad -} \frac{b}{+ \quad -} \rightarrow (a \neq b) = (1 \neq 3) \rightarrow x=1 \rightarrow (1-2)(1-1)(1+1) = -2$$

مجموعه x را مشخص

$$y = (a-1)x^2 + (a-1)x + 1 \neq 0 \rightarrow a-1 \neq 0 \rightarrow a \in \mathbb{R} \setminus \{1\} \rightarrow \rho = \frac{c}{a} = \frac{1}{a-1} \neq 0$$

$$\Delta < 0 \rightarrow a^2 + 1 - 2a - 4a + 4 < 0 \rightarrow (a-1)(a-3) < 0 \rightarrow \frac{1}{1-1} \neq \frac{1}{1-1} \rightarrow a \in (1, 3)$$

$$1 \cap 2 \cap 3 \rightarrow \emptyset$$

$$\frac{m^2(m^2+1)}{m-2} \rightarrow \frac{m^2}{-2} - \frac{1}{1} + \dots \rightarrow m > 2$$

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

$$[2, 3) \cup [5, \infty)$$

$$f(x) = \frac{wx^2 - vx}{x^2 + z} \rightarrow \frac{wx^2 - vx}{x^2 + z} \left\{ \begin{array}{l} r \rightarrow wx^2 - vx \\ r \rightarrow wx^2 + 1 \end{array} \right. \rightarrow \frac{wx^2 - vx - 1}{(x-z)(x+r)} \neq 0$$

$$\frac{-r}{+ \quad -} \frac{z}{+ \quad -} \rightarrow (a \neq b) = (-r \neq z) \rightarrow b - a = z - (-r) = c$$

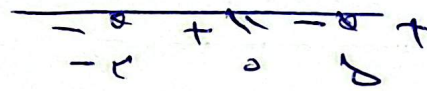
$$-1 \left\{ \frac{wx^2 - vx}{x+1} \right\} \neq 0 \rightarrow -1 \left\{ \frac{wx^2 - vx}{x+1} \right\} \neq 0 \rightarrow \frac{wx^2 - vx + x + 1}{x+1} \rightarrow \frac{wx^2 - vx + x + 1}{x+1}$$

$$\frac{-1}{-1} + \dots \rightarrow \textcircled{1} \quad x > -1 \left\{ \frac{wx^2 - vx}{x+1} \right\} \neq 0 \rightarrow \frac{x(wx - v)}{x+1} \neq 0 \rightarrow x \in (-\infty, -1) \cup (0, \frac{v}{w})$$

$$\textcircled{1} \cap \textcircled{2} \rightarrow (0, \frac{v}{w})$$

$$\frac{n^2 - 10}{n} \geq 0 \rightarrow \frac{n^2 - 10}{n} - 0 = \frac{n^2 - 10 - 0n}{n} \geq 0$$

$$\frac{(n+1)(n-10)}{n} \geq 0$$



$$n \in (-\infty, -1] \cup (0, 10]$$