

$$x^2 - 5x + p \begin{cases} S = 1 + 3 = 4 = a \\ P = 1 \times 3 = 3 = b \end{cases}$$

او 3 ریشہ دوا

(1)

$$a + b = 7$$

5

بعد از ا - علامت عوض نشود یعنی ا - علامت پس $(x - 3n)^2$ ریشہ ا - ا

(2)

$$-1 - 3n = 0 \rightarrow n = -\frac{1}{3}$$

6

چون $(x - 3n)^2$ همیشه + علامت پس علامت کج عبارت $(k - 2)$ مثبت دیکر

بعد از ک منفی علامت پس $k - 2 < 0 \rightarrow k < 2$ پس $k = 1$ علامت پس

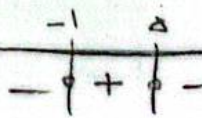
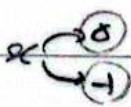
$$-k + m - 1 = 0$$

$$m = 0$$

ریشہ عبارت $k = 0$

$$\frac{m}{n} + k = \frac{0}{-\frac{1}{3}} + 1 = -14$$

$$-\frac{1}{3}x^2 + 2x + \frac{0}{3} > 0 \rightarrow -x^2 + 6x + 0 > 0$$



(3)

7

$$(a, b) \rightarrow (-1, 0) \rightarrow b - a = 5$$

Year: _____ Month: _____ Day: _____ ()

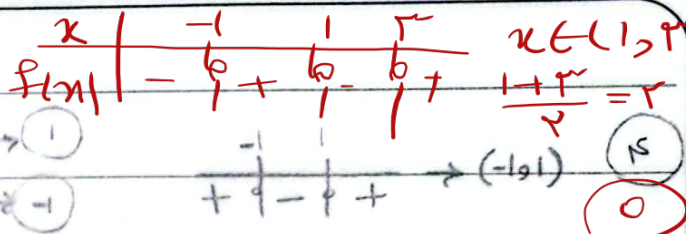
Subject: 10A *Al-Jabir*

$$x(x^r - 1) - r(x^r - 1) = 0$$

$$x^r - 1)(x - r) = 0 \rightarrow x = 1$$

$$\rightarrow x = -1$$

$$x^r - r x^{r-1} - x + r < 0 \rightarrow x = r$$



$x \in (1, r) = (a, b)$
 $f(1) = r$

$$f(0) = 0 \rightarrow f(0) = 0 - r(0) - 0 + r = r$$

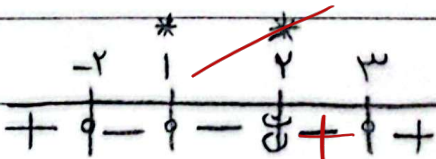
$$a - 1 < 0 \rightarrow a < 1 \rightarrow (-\infty, 1) \leftarrow \text{فريق } \textcircled{5}$$

$$a^r + 1 - r a - r a + r = (a - 1)(a - r) < 0 \leftarrow \text{فريق } \Delta$$



$$(-\infty, 1) \cap (1, r) = \emptyset$$

$$\frac{m^r(m^r + 1)}{m - r} > 0 \rightarrow \text{Number line for } m \text{ with critical points at } r \text{ and } +\infty. \text{ Sign is positive for } m > r. \textcircled{5}$$



$$-r, r, 1 = \text{فريق } \textcircled{7}$$

$r = \text{فريق خارج}$

$$[-r, r] \cup (r, +\infty)$$

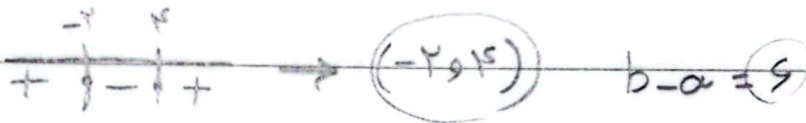
$\textcircled{*} \rightarrow \text{Casus}$

$$\rightarrow [-r, 1] \cup [1, r) \cup [r, +\infty)$$

$$\frac{3x^2 - 2x}{x^2 + 1} < 1 \rightarrow \frac{3x^2 - 2x - x^2 - 1}{x^2 + 1} < 0$$

8 (1)

$$\frac{x^2 - 2x - 1}{x^2 + 1} \rightarrow \frac{(x-1)(x+2)}{x^2 + 1} < 0$$

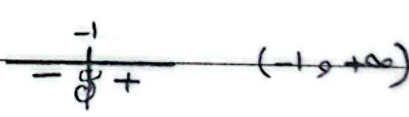


$$\frac{x(3x-1)}{x+1} < 0$$

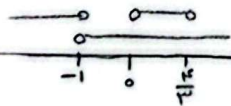
9



$$\frac{3x^2 - 4x + x + 1}{x+1} > 0 \rightarrow \frac{3x^2 - 3x + 1}{x+1} > 0$$



انتخاب



$$(0, 1/2)$$

7

$$\frac{x^2 - 10 - 3x}{x} \leq 0 \rightarrow \frac{(x-5)(x+2)}{x} \leq 0$$

10

