

۲. آخرین

نیمه انجدر منس / یازدهم A / تکلیف ۱

الف) $4x^2 - 5x - 4 = 0 \rightarrow x^2 - 5x - 4 = 0 \rightarrow (x-9)(x+6) = 0 \rightarrow x < \frac{9}{4} \div 4 \rightarrow x < \frac{9}{16}$ ✓

ب) $3x^2 - 11x - 2 = 0 \rightarrow x^2 - 11x - 2 = 0 \rightarrow (x-9)(x+1) = 0 \rightarrow x < \frac{9}{1} \div 3 \rightarrow x < \frac{1}{3}$ ✓

ج) $4x^2 - 4x - 3 = 0 \rightarrow x^2 - 4x - 3 = 0 \rightarrow (x-6)(x+2) = 0 \rightarrow x < \frac{6}{4} \div 4 \rightarrow x < \frac{3}{2}$ ✓

د) $2x^2 - 4x - 12 = 0 \rightarrow x^2 - 2x - 6 = 0 \rightarrow (x-1)(x+3) = 0 \rightarrow x < \frac{1}{2} \div 2 \rightarrow x < \frac{1}{4}$ ✓

ه) $x^2 - 4x - 12 = 0 \rightarrow (x-7)(x+2) = 0 \rightarrow x < \frac{7}{1} \div 1 \rightarrow x < 7$ ✓

ب) $2x^2 + 2x + 2 = 0 \rightarrow \frac{a+cb}{x} \rightarrow x = -1, x = -\frac{2}{1} = -2$ ✓

ج) $x^2 + 2x + 2 = 0 \rightarrow \Delta = b^2 - 4ac = 4 - 4(1)(2) = -4 < 0$ معادله حقیقی ندارد
د) $3x^2 + 3x - 2 = 0 \rightarrow \Delta = 9 - 4(3)(-2) = 33 \rightarrow x = \frac{-3 \pm \sqrt{33}}{6} = \frac{-1 \pm \sqrt{33}}{2}$ ✓

$A \times B = \{(1,2), (1,3), (2,2), (2,3), (3,2), (3,3)\}$ ✓

$B \times B = \{(2,2), (2,3), (3,2), (3,3)\}$ ✓ $A \times B = B^2 = \{(1,2), (1,3)\}$ ✓

الف) $f(x) = \{(3, m+2), (4, m+3), (5, m+4), (6, m+5), (7, m+6)\}$ $m^2 = m+2 \rightarrow m = -1$ ✓
if $m = 2$ then $f(x) = \{(2,4), (3,5)\}$ ✓

ب) $f(x) = \{(3, m+2), (4, m+3), (5, m+4), (6, m+5), (7, m+6)\}$ $m^2 = m+2 \rightarrow m = -1$ ✓
if $m = 2$ then $f(x) = \{(2,4), (3,5)\}$ ✓
بجای از هیچ مقدار m این مجموعه تابع نمی باشد ✓

PITICO

XIAOMI

09/04/2023 13:00

$$f(n) = \{(1, a^r), (1, ra-r), (a^r, ra+r)\} \quad a^r \leq ra-r \leq a^r \leq ra+r \leq (a-1)(a-1) \leq a < r \quad \rightarrow \Delta$$

if $a=1$ $\rightarrow$ $ra-r \neq ra+r$ $\rightarrow$ $a < r$

if $a \leq r$ $\rightarrow$ $\rightarrow$ $\rightarrow$

$$f(n) = \begin{cases} n-1 & n \leq 1 \\ a \times b & 1 \leq n \leq r \\ n^r & n \geq r \end{cases} \quad \left. \begin{aligned} n \leq 1 & \rightarrow n-1 \leq a+b \rightarrow a+b \\ n \leq r & \rightarrow a \times b \leq n^r \rightarrow a \times b \\ n \geq r & \rightarrow n^r \leq a+b \rightarrow a+b \end{aligned} \right\} \rightarrow \Delta \quad \rightarrow \Delta$$

$$f(n) = \begin{cases} r \times n & n \geq k \\ k-r & n \leq k \end{cases} \quad \left. \begin{aligned} r \times k & \leq k-r \\ k-r & \leq k-r \end{aligned} \right\} \rightarrow \Delta \quad \rightarrow \Delta$$

$$f(n) = \begin{cases} n^2 - 4n & n \geq 4 \\ 4n - n^2 & n \leq 4 \end{cases} \quad \left. \begin{aligned} n \geq 4 & \rightarrow n^2 - 4n \leq 4n - n^2 \\ n \leq 4 & \rightarrow 4n - n^2 \leq n^2 - 4n \end{aligned} \right\} \rightarrow \Delta \quad \rightarrow \Delta$$

$$f(n) = \begin{cases} n^2 + 4n & n \geq 4 \\ 4n - n^2 & n \leq 4 \end{cases} \quad \left. \begin{aligned} n \geq 4 & \rightarrow n^2 + 4n \leq 4n - n^2 \\ n \leq 4 & \rightarrow 4n - n^2 \leq n^2 + 4n \end{aligned} \right\} \rightarrow \Delta \quad \rightarrow \Delta$$

$$f(n) = \begin{cases} n^2 + 4n & n \geq 4 \\ 4n - n^2 & n \leq 4 \end{cases} \quad \left. \begin{aligned} n \geq 4 & \rightarrow n^2 + 4n \leq 4n - n^2 \\ n \leq 4 & \rightarrow 4n - n^2 \leq n^2 + 4n \end{aligned} \right\} \rightarrow \Delta \quad \rightarrow \Delta$$

$$f(n) = \begin{cases} n^2 + 4n & n \geq 4 \\ 4n - n^2 & n \leq 4 \end{cases} \quad \left. \begin{aligned} n \geq 4 & \rightarrow n^2 + 4n \leq 4n - n^2 \\ n \leq 4 & \rightarrow 4n - n^2 \leq n^2 + 4n \end{aligned} \right\} \rightarrow \Delta \quad \rightarrow \Delta$$

$$f(n) = \begin{cases} n^2 + 4n & n \geq 4 \\ 4n - n^2 & n \leq 4 \end{cases} \quad \left. \begin{aligned} n \geq 4 & \rightarrow n^2 + 4n \leq 4n - n^2 \\ n \leq 4 & \rightarrow 4n - n^2 \leq n^2 + 4n \end{aligned} \right\} \rightarrow \Delta \quad \rightarrow \Delta$$

$$f(n) = \begin{cases} n^2 + 4n & n \geq 4 \\ 4n - n^2 & n \leq 4 \end{cases} \quad \left. \begin{aligned} n \geq 4 & \rightarrow n^2 + 4n \leq 4n - n^2 \\ n \leq 4 & \rightarrow 4n - n^2 \leq n^2 + 4n \end{aligned} \right\} \rightarrow \Delta \quad \rightarrow \Delta$$

$$f(n) = \begin{cases} n^2 + 4n & n \geq 4 \\ 4n - n^2 & n \leq 4 \end{cases} \quad \left. \begin{aligned} n \geq 4 & \rightarrow n^2 + 4n \leq 4n - n^2 \\ n \leq 4 & \rightarrow 4n - n^2 \leq n^2 + 4n \end{aligned} \right\} \rightarrow \Delta \quad \rightarrow \Delta$$

$$f(n) = \begin{cases} n^2 + 4n & n \geq 4 \\ 4n - n^2 & n \leq 4 \end{cases} \quad \left. \begin{aligned} n \geq 4 & \rightarrow n^2 + 4n \leq 4n - n^2 \\ n \leq 4 & \rightarrow 4n - n^2 \leq n^2 + 4n \end{aligned} \right\} \rightarrow \Delta \quad \rightarrow \Delta$$

$$f(n) = \begin{cases} n^2 + 4n & n \geq 4 \\ 4n - n^2 & n \leq 4 \end{cases} \quad \left. \begin{aligned} n \geq 4 & \rightarrow n^2 + 4n \leq 4n - n^2 \\ n \leq 4 & \rightarrow 4n - n^2 \leq n^2 + 4n \end{aligned} \right\} \rightarrow \Delta \quad \rightarrow \Delta$$