

زیر اتحاد منس / یازدهم / A / تالیف ۱

۱- $4x^2 - 2x - 4 = 0 \rightarrow x^2 - 2x - 4 = 0 \rightarrow (x-9)(x+2) = 0 \rightarrow x < \frac{9}{4} \div 4 \rightarrow x < \frac{9}{4}$

۲- $2x^2 - 1x - 2 = 0 \rightarrow x^2 - 1x - 2 = 0 \rightarrow (x-9)(x+1) = 0 \rightarrow x < \frac{9}{1} \div 2 \rightarrow x < \frac{9}{2}$

۳- $4x^2 - 4x - 2 = 0 \rightarrow x^2 - x - 1 = 0 \rightarrow (x-9)(x+2) = 0 \rightarrow x < \frac{9}{2} \div 4 \rightarrow x < \frac{9}{4}$

۴- $2x^2 - 4x - 2 = 0 \rightarrow x^2 - 2x - 1 = 0 \rightarrow (x-9)(x+3) = 0 \rightarrow x < \frac{9}{2} \div 2 \rightarrow x < \frac{9}{2}$

۵- $x^2 - 2x - 1 = 0 \rightarrow (x-7)(x+3) = 0 \rightarrow x < \frac{7}{2}$

۶- $2x^2 + 2x + 2 = 0 \rightarrow \frac{a+cb}{2} \rightarrow x = -1, x = -\frac{2}{2} = -1$

۷- $x^2 + 2x + 2 = 0 \rightarrow \Delta = b^2 - 4ac = 4 - 4(1)(2) = -4 < 0$
 $2x^2 + 2x - 2 = 0 \rightarrow \Delta = b^2 - 4ac = 4 - 4(2)(-2) = 20 > 0 \rightarrow x = \frac{-2 \pm \sqrt{20}}{4} = \frac{-1 \pm \sqrt{5}}{2}$

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

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

۸- $f(x) = \{(3, m+2), (4, m+2), (5, m+2), (6, m+2), (7, m+2), (8, m+2), (9, m+2)\}$
 if $m \leq 1$ then $f(x)$ is not a function

۹- $f(x) = \{(3, m+2), (4, m+2), (5, m+2), (6, m+2), (7, m+2), (8, m+2), (9, m+2)\}$
 if $m \leq 1$ then $f(x)$ is not a function

PITICO

XIAOMI

09/04/2023

$f(n) \in \{(1, a^r), (1, r a - r), (a^r, r a + r)\}$ $a^r \leq r a - r$ $a^r \leq r a + r$ $\rightarrow \Delta$
 if $a \neq 1$ $\rightarrow r a - r \neq r a + r$ $\rightarrow$ $(a-1)(a+1) \leq 0$
 $a < -1$
 if $a \leq -1$ $\rightarrow$ $\in$ $\rightarrow$ $\in$

$f(n) \in \begin{cases} n^r - 1 & n \leq 1 \\ a n b & 1 < n < r \\ n^r & n \geq r \end{cases}$ $n \leq 1 \rightarrow n^r - 1 \leq r a n + b \rightarrow 0 \leq r a + b$ $\rightarrow \Delta$
 $n \geq r \rightarrow a n b \leq n^r \rightarrow \Delta \leq r a + b$ $\rightarrow \Delta$
 $b \leq -1$
 $a \times b \leq -1 \times 1 = -1$

$f(n) \in \begin{cases} r n - r & n \geq k \\ r^k - r n & n \leq k \end{cases}$ $r k - r \leq r^k - r k$ $\Delta k \leq r$ $k \leq \frac{r}{2} = 1, 2$

$y^r - y = x^r - r x + r$ $x \leq r$ $y^r - y = x^r - r x + r$ $y(y^r - y) = 0$ $y(y^r - y) = 0$ $y = 0$ $y = \pm \sqrt{y}$ $y = \pm \sqrt{y}$

$|x| + |y| \leq r$ $x \leq 1$ $|y| \leq r$ $\rightarrow y \leq \pm r$

$|y| \leq \sqrt{1 - \cos x}$ $x \leq 90^\circ \rightarrow \sqrt{1 - \cos x} \leq |y| \rightarrow y = \pm 1$

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

$\sqrt{y} + x^r + r x - r \leq \sqrt{y}$ $\sqrt{y} \leq \sqrt{y}$ $\sqrt{y} \leq \sqrt{y}$ $\sqrt{y} \leq \sqrt{y}$ $\sqrt{y} \leq \sqrt{y}$ $\sqrt{y} \leq \sqrt{y}$ $\sqrt{y} \leq \sqrt{y}$ $\sqrt{y} \leq \sqrt{y}$ $\sqrt{y} \leq \sqrt{y}$ $\sqrt{y} \leq \sqrt{y}$

$x \sin y \leq y \sin x$ if $x \leq y$ $\rightarrow y \leq r$ $\rightarrow y \leq r$ $\rightarrow y \leq r$ $\rightarrow y \leq r$ $\rightarrow y \leq r$ $\rightarrow y \leq r$ $\rightarrow y \leq r$ $\rightarrow y \leq r$ $\rightarrow y \leq r$ $\rightarrow y \leq r$