

نام و نام خانوادگی پاسخنامه تشریحی تکلیف شماره ۲ کلاس پایه دهم B

۱۲. اگر $x^2 + y^2 - 4x + 4y + k = 0$ یک دایره باشد، k کلم است

اگر $a > 0$ — $\rho(n)$ ضابطه‌ای تعریف می‌کنیم که مقدار $A(n)$ را می‌دهد (و $a > 0$)

اگر $a > 0$ $\rho(n) = \begin{cases} n^2 + 4n & n \geq a \\ 4n + 4 & n < a \end{cases}$

پس $a^2 + 4a = 4a + 4 + 4 = 8$ $\Rightarrow a^2 - a - 4 = 0 \Rightarrow (a - 2)(a + 2) = 0$

$a > 0 \Rightarrow a \begin{cases} \rightarrow 2 \\ \rightarrow -1 \end{cases}$

$|n+1| > 2 \Leftrightarrow |n+1| \leq -2$
 $\rightarrow n+1 > 2 \rightarrow n > 1 \quad \rightarrow n+1 \leq -2 \rightarrow n \leq -3$
 $(-\infty, -3] \cup [1, +\infty)$

از داده‌های $y = \sqrt{4x-a} + \sqrt{b-3x}$ برابر $\{x\}$ باشد، حاصل $\frac{b}{a}$ کدام است

عدد صحیح $a = 12$
عدد صحیح $b = 6$
عدد صحیح $\frac{b}{a} = \frac{6}{12} = \frac{1}{2}$

$$\textcircled{1} = \frac{-1}{s^2 + 1} \Rightarrow (-\infty, -1] \cup (1, \infty)$$

الف) $y = \sqrt[3]{\frac{x+1}{x^2+1}} + \sqrt{\frac{x-2}{x^2+2x+2}}$

$$|Y\rangle = (-0.94) \quad |N\rangle = (-0.1) \cup (0.94)$$

داده‌ی تداخ زیر را با μ است $\rightarrow [a] \rightarrow [b] \rightarrow [c] \rightarrow [d] \rightarrow [e] \rightarrow [f] \rightarrow [g] \rightarrow [h] \rightarrow [i] \rightarrow [j] \rightarrow [k] \rightarrow [l] \rightarrow [m] \rightarrow [n] \rightarrow [o] \rightarrow [p] \rightarrow [q] \rightarrow [r] \rightarrow [s] \rightarrow [t] \rightarrow [u] \rightarrow [v] \rightarrow [w] \rightarrow [x] \rightarrow [y] \rightarrow [z]$

$$\therefore y = \sqrt{\overset{(1)}{x^2 - x}} + \sqrt{\overset{(2)}{y^2 - xy}}$$

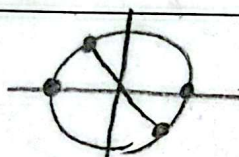
$$y - [x] > 0 - [x] \leq y \Rightarrow (-\infty, y]$$

$$M \cap Y = \emptyset$$

$(n-1)(n+1)$
 $y = \sqrt{\frac{x^2 - n - 4}{x^2 - 13x + 4}}$
 $x = A \Rightarrow A^2 - 13A + 4 = (A-1)(A-4)$
 $x = \frac{1}{2} \Rightarrow \frac{1}{4} - \frac{13}{2} + 4 = -\frac{21}{4}$
 $D = (-\infty, -\frac{1}{2}) \cup (-\frac{1}{2}, 4) \cup (4, +\infty) \rightarrow \text{جواب}$

$-[x] - y > 0 \Rightarrow [x] < -y$

$y = \sqrt{-[x] - y}$
 $(-\infty, -1) \rightarrow \text{جواب}$

$\sin x \neq 0$
 $\tan x \neq 1$


$y = \frac{\cot x + 1}{\tan x + 1}$

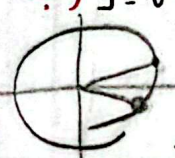
$D = \mathbb{R} - \{k\pi, k\pi + \frac{\pi}{4}\}$

$1 - \log_{\frac{1}{4}}^{x-1} > 0 \Rightarrow \log_{\frac{1}{4}}^{x-1} < 1$
 $x-1 < \frac{1}{4}$
 $x < \frac{5}{4}$
 $y = \sqrt{1 - \log_{\frac{1}{4}}^{x-1}}$
 $D = (-\infty, \frac{5}{4}]$

$x - x^2 - 1 > 0 \Rightarrow x^2 - x + 1 < 0$
 $(x-1)(x+1) < 0$
 $y = \sqrt{x^2 - x - 1}$
 $\frac{1}{x+1} > 0 \Rightarrow D = [1, +\infty) \rightarrow \text{جواب}$

$x^2 - 2x^2 - 2x + 4 = x - 1 = x^2 - 2x^2 - 2x + 4$
 $y = \sqrt{\frac{x^2 - 2x^2 - 2x + 4}{x^2 - 2x^2 - 2x + 4}}$
 $x^2 - 2x^2 - 2x + 4 = x - 1$
 $x^2 - 2x^2 - 2x + 4 = x - 1$
 $D = (-\infty, -1) \cup (-1, 4) \cup (4, +\infty) \rightarrow \text{جواب}$

$y = \frac{2x^2 + 4}{[x]^2 - 2[x] - 3}$
 $[x] > 3 \Rightarrow (-\infty, +\infty)$
 $[x] < -1 \Rightarrow (-\infty, 0)$
 $D = (-\infty, 0) \cup (4, +\infty)$

$1 - \sin^2 x > 0 \Rightarrow \sin^2 x < 1 \Rightarrow \sin x < 1$
 $y = \sqrt{1 - \sin^2 x}$

 $D = [\frac{\pi}{2}, \frac{3\pi}{2}]$

$1 - \log_{\frac{1}{4}}^{x-1} > 0 \Rightarrow \log_{\frac{1}{4}}^{x-1} < 1$
 $x-1 < \frac{1}{4}$
 $x < \frac{5}{4}$
 $y = \sqrt{x^2 - x}$
 $D = (-\infty, -1) \cup [0, 1] \cup (4, +\infty)$

$y = \sqrt{\frac{x^2 + 2}{x^2 + 4}}$
 $y = \left(\frac{x^2 + 2}{x^2 + 4} \right)^{\frac{1}{2}}$
 $\Rightarrow \{x | x \in \frac{-x+2}{x-4}, x \in \mathbb{R}\} \rightarrow \text{جواب}$