

IR: ν_{max}

۲۰۰۰ کلاس: ۲۰۰۰

$$D = \begin{pmatrix} 1 & 1 & -3 \\ 3 & 3 & -3 \\ 2 & 2 & 2 \end{pmatrix}$$

$$D = \begin{pmatrix} 1 & 1 & -3 \\ 0 & 0 & 0 \\ 0 & 0 & 0 \end{pmatrix}$$

$$D = \begin{pmatrix} 1 & 1 & -3 \\ 0 & 0 & 0 \\ 0 & 0 & 0 \end{pmatrix}$$

$$\frac{1}{n^2} \int_0^n (x+y) dx = \frac{1}{n^2} \left[\frac{x^2}{2} + xy \right]_0^n = \frac{1}{n^2} \left(\frac{n^2}{2} + ny \right) = \frac{1}{2} + \frac{y}{n}$$

$$y = \frac{p}{x^4 - \omega(x-1) - x + \omega}$$

$$D = R - \{0, 2, 5, -3\} \quad \text{جواب}$$

$$D = 1R - \left\{ \frac{1}{2} - \frac{1}{4} \right\}$$

$$D_c = \left(-\frac{1}{2} - \frac{1}{4} \right) \cup \left(\frac{1}{2} + \frac{1}{4} \right)$$

$x > 0 \quad 1 - \log_y^x > 0 \Rightarrow \log_y^x < 1$
 $\Rightarrow x < y$
 الف) $y = \log_y(1 - \log_y^x)$
 $D_f = (0, y)$

ب) $\frac{x^3 + 3x^2 + 3x + 1}{x^3 + 9x^2 + 10x + 3}$ به $x+1$ تقسیم می‌شود

اصل و اربع زیر آن سه $\frac{3}{4}$

۳- $\frac{+9-3}{-3}$

$$D_E = (-\infty, 9] \cup (19, +\infty) \rightarrow \frac{1}{2}$$

$$+2 \leq x + y \leq 2 \Rightarrow x + y = 2$$

$$D_c = (-\infty, -\frac{4}{y}) \cup [1, +\infty) \rightarrow \text{!} \checkmark$$

$$D_C = \left(\frac{1}{4}, 0 \right) \rightarrow -1/2 \checkmark$$

$$2n-1 > 0 \Rightarrow n > \frac{1}{2} \quad \textcircled{1}$$

$$\log(2n-1) > 0$$

$$2n-1 > 1 \Rightarrow n > 1 \quad \textcircled{2}$$

$$f(y) = \sqrt{\log \log_a^{(2n-1)}}$$

$$\log \log^{(2n-1)}$$

$$\Rightarrow 2n-1 > 4 \Rightarrow n > 2.5 \quad \textcircled{3}$$

$$1n2n3 = D_E = [30+\infty) \cup (1,3]$$

1,5

$$2\cos x + 1 > 0 \Rightarrow \cos x > -\frac{1}{2}$$

$$\frac{n-1}{n+1} > 0 \Rightarrow \frac{-1}{3-4} = (-\infty, 1) \cup (0, \infty) \quad \textcircled{1}$$

$$y = \log(2\cos x + 1)$$



$$R = \left[2\pi k + \frac{2\pi}{3}, 2\pi k + \frac{4\pi}{3} \right]$$

$$y = \sqrt{\log \frac{x-1}{x+1}} \Rightarrow \log \frac{x-1}{x+1} > 0$$

$$\frac{x-1}{x+1} > 1 \Rightarrow \frac{x-1-x-1}{x+1} > 0 \Rightarrow \frac{-2}{x+1} > 0 \Rightarrow x < -1 \Rightarrow (-\infty, -1) \quad \textcircled{2}$$

1,75

$$f(x) = \sqrt{(ax+b)x^2+cx+d} \quad \text{تابع}$$

0

اگر دامنه تابع $f(x) = \sqrt{x^2 + 2x + 2 - m^2}$ مجموعه اعداد حقیقی باشد اختلاف مقادیر m کدام است

$$D = b^2 - 4ac$$

$$\Rightarrow 4 - 4(2 - m^2) \leq 0 \Rightarrow 4 - 8 + 4m^2 \leq 0 \Rightarrow 4m^2 - 4 \leq 0 \Rightarrow m^2 - 1 \leq 0 \Rightarrow |m| \leq 1$$

$$m = \begin{cases} 1 & \text{بیشینه مقدار} \\ -1 & \text{کمینه مقدار} \end{cases}$$

$$1 - 1 = 0$$

$$\text{جواب } \frac{0}{0} \rightarrow \text{لغته اختلاف!!} \quad \textcircled{2}$$

1,75

$$f(x) = \sqrt{4 - x^2} \quad \text{تابع در دامنه صحیح}$$

$$1n2 = -2 \leq x \leq 2$$

$$Z = \textcircled{2}$$

$$\{ -2, -1, 0, 1, 2 \} \rightarrow \text{مقادیر}$$

2

جواب