

مجموعه جواب

۱۳/۵

بازرسی

آزمون (مکمل)

$$\frac{x+3}{x^3+x^2-11x+3}$$

$$D_f = \mathbb{R} - \left\{ -3, \frac{1}{2}, 1 \right\}$$

$$\frac{x^3+x^2-11x+3}{x^3+x^2-11x+3} \cdot \frac{x-1}{x-1}$$

$$\frac{x^4-x^3-10x^2+13x-3}{x^4-x^3-10x^2+13x-3}$$

$$\frac{-10x^2+13x-3}{x^4-x^3-10x^2+13x-3}$$

$$\frac{-10x^2+13x-3}{x^4-x^3-10x^2+13x-3}$$

$$\frac{x+3}{x^3+9x^2+10x+3}$$

$$D_f = \mathbb{R} - \left\{ -3, -1, -\frac{1}{2} \right\}$$

$$\frac{x^3+9x^2+10x+3}{x^3+9x^2+10x+3} \cdot \frac{x+1}{x+1}$$

$$\frac{x^4+10x^3+26x^2+13x+3}{x^4+10x^3+26x^2+13x+3}$$

$$\frac{10x^3+26x^2+13x+3}{x^4+10x^3+26x^2+13x+3}$$

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

$$D_f = \mathbb{R} - \{ +1 \}$$

$$\frac{x^3-2x^2+2x-1}{x^3-2x^2+2x-1} \cdot \frac{x-1}{x-1}$$

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

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

$$\sqrt{\frac{x+3}{x^3-2x^2+2x-1}}$$

$$\sqrt{\frac{x+3}{(x-1)(x^2-x+1)}}$$

$$\frac{-3}{+3} - \frac{1}{+3} +$$

$$D_f = (-\infty, -3] \cup (1, +\infty)$$

$$x^2-2|x-1|-2x = -2$$

$$x^2-2|x-1|-2x = -2 \rightarrow x^2-2x+2 = -2 \rightarrow x^2-2x+4 = 0$$

$$x^2-2x+4 = 0 \rightarrow x^2+2x-2 = 0 \rightarrow x^2+2x-2 = 0$$

$$\frac{x^2+2}{x^2-2} \rightarrow \frac{x^2+2}{x^2-2}$$

$$\frac{x^2+2}{x^2-2} \rightarrow \frac{x^2+2}{x^2-2}$$

$$D_f = \mathbb{R} - \left\{ -2, 1, 4 \right\}$$

$$|2x+1| = |x+3|$$

$$-\frac{1}{2}$$

$$2x+1 = x+3$$

$$x = 2$$

$$2x+1 = -x-3$$

$$3x = -4 \rightarrow x = -\frac{4}{3}$$

$$-2x-1 = -x-3$$

$$-x = -2 \rightarrow x = 2$$

$$D_f = \mathbb{R} - \left\{ -\frac{4}{3}, 2 \right\}$$

$$2x+1 > x+3$$

$$2x+1 > x+3 \rightarrow x > 2$$

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

$$-2x-1 > -x-3 \rightarrow -x > -2 \rightarrow x < 2$$

کافیست طرفین را به توان ۲ برسانیم و نامعادله را حل کنیم

فصل ۲

بازرسی

آرشیو (ماتری)

$$1 - \log_{\frac{1}{x}} > 0 \rightarrow \log_{\frac{1}{x}} < 1 \rightarrow x < 2 \quad D_f = x < 2$$

$$1 - \log_{\frac{1}{x}} > 0 \rightarrow \log_{\frac{1}{x}} < 1 \rightarrow x < \frac{1}{2} \quad D_f = x < \frac{1}{2}$$

$$D = (\frac{1}{2}, +\infty)$$

$$2x - 1 > 0 \rightarrow 2x > 1 \rightarrow x > \frac{1}{2} \checkmark$$

$$\log_{\frac{1}{x}} > 0 \rightarrow 2x - 1 > 1 \rightarrow 2x > 2 \rightarrow x > 1 \checkmark$$

$$D_f = [2, +\infty)$$

$$(1, 2)$$

$$\log_{\frac{1}{x}} \geq 0 \rightarrow \log_{\frac{1}{x}} \geq 1 \rightarrow 2x - 1 \geq 1 \rightarrow 2x \geq 2 \rightarrow x \geq 1$$

$$2(\cos x + 1) > 0 \rightarrow 2(\cos x) - 1 \rightarrow \cos x > -\frac{1}{2} \checkmark$$



$$D_f = [2k\pi, 2k\pi + \frac{2\pi}{3}) \quad D = (2k\pi - \frac{2\pi}{3}, 2k\pi + \frac{2\pi}{3})$$

$$a^2 - f(b)(a+1) = a^2 - fba - Ab = 0$$

$$\frac{-a}{2a+f} = 2$$

$$a(a-fb) = \frac{1f}{f} + \frac{f}{f} b - 1b = 0$$

$$2a+1f = -a \rightarrow 3a = -1f \rightarrow a = -\frac{f}{3}$$

$$\frac{1f}{f} - \frac{1}{f} b = 0 \rightarrow b = \frac{1f}{f}$$

$$\Delta < 0 \rightarrow f - f(2-m^2) < 0 \rightarrow f < f(2-m^2) \rightarrow f < 15m^2$$

$$fm^2 - f < 0 \rightarrow f(m+1)(m-1) < 0$$

$$+1 - (-1) = 2 \checkmark$$

$$f - x^2 \geq 0 \rightarrow x^2 \leq f \rightarrow -\sqrt{f} \leq x \leq \sqrt{f}$$

$$x \in \mathbb{Z}$$

$$D_f = \{-2, -1, 0, 1, 2\}$$