

(3)

سلسلة عرقي زائد ٢٠ أفديت

$$f(x) = \begin{cases} 2x-1 & x \geq 1 \\ x+2 & x < 1 \end{cases} \quad \sqrt{f(x) - x + 1} \quad (1)$$

(2)

$$x \geq 1 \Rightarrow 2x-1 - x + 1 \geq 0 \Rightarrow x \geq 0 \Rightarrow I \cap II = \{x \geq 1\}$$

$$x < 1 \Rightarrow x+2 - x + 1 \geq 0 \Rightarrow x \geq -3 \Rightarrow I \cap II = \left[-\frac{3}{2}, 1\right)$$

$$-\frac{3}{2} \leq x < 1$$

$$\left[-\frac{3}{2}, 1\right)$$

$$y = \frac{2x^3 + 3x^2 + 11x + 2}{(2x+1)^4} \Rightarrow Df = IR - \left\{ -\frac{1}{2} \right\} \quad (1) \quad (2)$$

$$\Rightarrow \psi(2x^3 + 3x^2 + 11x + 2) = \psi(2x+1)^4 \Rightarrow$$

$$\frac{\psi(2x+1)^4}{(2x+1)^4} = \frac{\psi}{2x+1}$$

$$\boxed{x+2} \quad \frac{(x^2-1)(x+2)}{x^2-1} = \frac{x^2(x+2) - (x+2)}{x^2-1} \quad x \neq \pm 1 \quad (1) \quad (2)$$

$$b+c = (2, 1)$$

$$ax+2$$

$$x = \pm 1$$

$$x=1 \Rightarrow \frac{a+2}{1+b} = 2 \Rightarrow a+2 = 2b+2 \Rightarrow a = 2b$$

$$a = 2b+1$$

$$2-b = 2b+1$$

$$b = \frac{1}{3}$$

$$b = \frac{1}{3}$$

$$x=-1 \Rightarrow \frac{-a+2}{-1+b} = 1 \Rightarrow 2-a = b-1 \Rightarrow a = 3-b$$

$$a = \frac{4}{3}$$

MAHAN

$$x=1 \Rightarrow c+1 = 2 \Rightarrow c = 1$$

۲. تابع دقتی برابرند که به ازای دامنه یکسان، یکسان عمل کنند (دامنه‌ها برابر)

$$x^2 + ax + b = (x - c)^2$$

$$g(x) = f(x) \times \frac{x-1}{x-c} \quad \text{کسر برابر با ۱} \Rightarrow x-1 = x-c$$

$$x^2 + ax + b = (x-1)^2 \Rightarrow$$

$$\boxed{a = -2} \quad \boxed{b = 1}$$

$$\boxed{a+b+c = 0}$$

$$(-x-2)^2 = (x+2)^2$$

$$(x+1-2)^2 (x+1-1) + (1-x-2)^2 (1-x-1)$$

$$(x-2)^2 (x) + (x+2)^2 (-x)$$

$$-x((x-2)^2 - (x+2)^2) = -x(x^2 + 4x + 4 - (x^2 - 4x + 4))$$

$$-x(\wedge x) = -\wedge x^2$$

$$1 - 2x = -1 \Rightarrow x = 1 \Rightarrow \sqrt{1} = 1$$

$$1 - 2x = 3 \Rightarrow x = -1 \Rightarrow \sqrt{-1+2} = 1$$

$$x + \sqrt{x} = 4 \Rightarrow x = 9$$

$$x(x+2)$$

$$5x \times 5V = 24 \wedge$$

$$f(x) = x(x^2+1)$$

$$(x-1)((x-1)^2+1) + (1-x)((x-1)^2+1) = 0$$

تنها دامنی مشترک (1)

$$\sqrt{x-2}, \sqrt{x-1} \Rightarrow b=2, a=\frac{x}{x}$$

$$2x-2-2x = k \Rightarrow k=-1$$

$$f_x\left(\frac{x}{x}\right) = \frac{x}{x} - (-1) = x - 2 + 1 = 1$$

$$Dg = [-1, +\infty) \quad I$$

$$Df = (-\infty, m] \quad II$$

$$I \cap II \Rightarrow [-1, m] = [-1, v] \Rightarrow m=v$$

$$\left. \begin{aligned} f(x) &= \sqrt{x-2} + n = n+2 \\ g(x) &= 2\sqrt{x} \end{aligned} \right\} n = \sqrt{x} - 2$$

$$n+n = \sqrt{x} + 0$$