

رب الذي خلق المصير

Date:

Subject:

(3)

سلسلة عرقي زائد

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

$$\sqrt{f(x) - x + 1} \quad (1)$$

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

$$x < 1 \Rightarrow x+1 - x + 1 \geq 0 \Rightarrow x \geq -2 \Rightarrow I \cap II = -2 \leq x < 1$$

$$-2 \leq x < 1$$

$$[-2, +\infty)$$

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

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

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

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

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

$$ax+2$$

$$x = \pm 1$$

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

$$a = b-1$$

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

$$-b = 2 \Rightarrow b = -2$$

$$b = -2$$

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

$$a = \frac{1}{2}$$

MAHAN

$$x=1 \Rightarrow c+1 = 1 \Rightarrow c = 0$$

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

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

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

$$x^2 + ax + b = (x-1)^2 \Rightarrow \begin{cases} a = -2 \\ b = 1 \end{cases} \quad \boxed{C=1}$$

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

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

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

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

$$-x((x-1)^2 - (x+2)^2) = -x(x^2 - 2x + 1 - (x^2 + 4x + 4))$$

$$-x(\wedge x) = \boxed{-\wedge x^2}$$

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

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

$$x + \sqrt{x} = 4 \Rightarrow x = 4 \quad x(x+2)$$

$$4 \times 6 = 24$$

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

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

تفاوت دایره‌ای مشترک (1)

$$\sqrt{r-rx}, \sqrt{rx-r} \Rightarrow b=r \quad a=\frac{r}{r}$$

$$rx-r-rx=r \Rightarrow r=-1$$

$$r_x\left(\frac{r}{r}\right) - \frac{r}{r} - (-1) = r-r+1 = 1$$

$$\cancel{Dg} = \cancel{Df} \quad Dg = [-1, +\infty) \quad I$$

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

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

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

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