

صفر

بدنه بدون اسم صفری فا مر شود
جواب این که بدست نداشتیم دقیق بخوان!

$$\begin{aligned} f(x+1) &= (x-1)^2(x) = \cancel{x^3} - \cancel{4x^2} + \cancel{4x} \\ f(1-x) &= (-x-1)^2(-x) = \cancel{-x^3} - \cancel{4x^2} - \cancel{4x} \end{aligned} \left. \vphantom{\begin{aligned} f(x+1) \\ f(1-x) \end{aligned}} \right\} + \rightarrow -4x^2 = g(x)$$

رفت!

$$\begin{aligned} f(3) &= f(1-2x) \rightarrow x = -1 \rightarrow \sqrt{-1} + 2 = 1 \\ f(-1) &= f(1-2x) \rightarrow x = 1 \rightarrow \sqrt{1} = 1 \end{aligned} \left. \vphantom{\begin{aligned} f(3) \\ f(-1) \end{aligned}} \right\} + \rightarrow 4$$

$$f(4) = f(x+2) \rightarrow x = 2 \rightarrow f + 2^3(4) = 2 \quad \checkmark$$

$$\begin{aligned} f(x) &= x^3 + x \\ (x-1)^3 + (x-1) &= \cancel{x^3} - \cancel{3x^2} + \cancel{3x} - \cancel{1} + \cancel{x} - \cancel{1} \\ -(x-1)^3 - (x-1) &= \cancel{-x^3} + \cancel{3x^2} - \cancel{3x} + \cancel{1} - \cancel{x} + \cancel{1} \end{aligned} \left. \vphantom{\begin{aligned} (x-1)^3 + (x-1) \\ -(x-1)^3 - (x-1) \end{aligned}} \right\} + \rightarrow 0$$

۵ - ۹

۱۰ - صفر

(r) - r

$$\frac{(x-1)(x+1)(x+r)}{(x-1)(x+1)} = x+r$$

$$x+r = x+c \rightarrow c=r$$

$$\frac{ax+r}{x+b} \begin{cases} x=-1 \rightarrow \frac{-a+r}{-1+b} \\ x=1 \rightarrow \frac{a+r}{1+b} \end{cases}$$

$$\frac{-a+r}{-1+b} = \frac{-1}{-1+b} = +1 \rightarrow -1+b = -a+r$$

$$\frac{a+r}{1+b} = \frac{1}{1+b} = r \rightarrow r+b = a+r$$

$$1+b = a$$

(1) - f

$$c+b = r/w$$

$$f b = r$$

$$b = r/w$$

$$\frac{(x+1)(x-1)}{(x-1)(x-b)} = \frac{x+1}{x-b}$$

$$b=c$$

$$(x-1) \cdot (x-b) = x^2 - bx - 1x + b$$

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

$$a+b+c = ?$$

$$a = -b-1$$

$$[x] > f \quad \sqrt{2x-x-1+1} = \sqrt{x} \rightarrow D = [-\infty, +\infty) \quad \text{D} = [0, +\infty)$$

$$[x] \leq f \quad \sqrt{2x-x+1+1} = \sqrt{x+2} \rightarrow D = [-\frac{f}{2}, +\infty) \quad D = (-\infty, f]$$

$$[-\frac{f}{2}, +\infty) \leftarrow \cup \quad \left[-\frac{f}{2}, f \right] \leftarrow \cap \quad [0, +\infty)$$

مساوی ۰ قرار می دهیم تا همیشه یاد ریاضی و بجز اتقاد بسازم

$$24x^3 + 124x^2 + 18x + 1 = 0$$

$$\downarrow$$

$$11(2x^3 + 11x^2 + 4x + 1) = 0$$

بگذاریم مساوی ۰ می شود

$$2(x + \frac{1}{2})(2x^2 + 8x + 2) = 4(x + \frac{1}{2})(x+1)(x+1)$$

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

$$y = \frac{3(2n^2+1) + 18n(2n+1)}{(2n+1)^4} = \frac{3(2n+1)(2n^2-2n+1) + 18n(2n+1)}{(2n+1)^4}$$

$$y = \frac{12n^2 + 12n + 3}{(2n+1)^3} = \frac{3(2n+1)^2}{(2n+1)^3} = \frac{3}{2n+1} \Rightarrow Dy = IR - \left\{ -\frac{1}{2} \right\}$$

۴- چون دو تابع با هم برابرند دامنه‌های برابر داشتند :
یعنی g و f در خروج ریشه مضاعف داشته :

$$n^2 + an + b = (n - c)^2 = n^2 - 2cn + c^2 \rightarrow \begin{cases} a = -2c \\ b = c^2 \end{cases}$$

$g(n) = f(n) \rightarrow$ همچنین ضابطه‌ها یکسان دارند :

$$\frac{n^2-1}{n^2+an+b} = \frac{n+1}{n-c} \rightarrow \frac{(n-1)(\cancel{n+1})}{(n-c)^2} = \frac{\cancel{n+1}}{\cancel{n-c}} \rightarrow \begin{cases} c=1 \\ a=-2 \\ b=1 \end{cases} \text{ جواب: } \boxed{5}$$

۹- اشتراک دامنه f و g فقط $n=1$ است پس :

$$D_f = \left[\frac{a}{f}, +\infty \right) \quad D_g = \left(-\infty, \frac{b}{f} \right] \xrightarrow{\text{13}} \{1\}$$

$$\frac{a}{f} = \frac{b}{f} = 1 \rightarrow a = \frac{f}{3} \quad b = f$$

$$f(1) - g(1) = K \rightarrow 2K - 2 - 3K = K \rightarrow K = -1$$

$$a - \frac{b}{f} = K = \boxed{3}$$

$$D_f = (-\infty, m]$$

$$\Rightarrow D_{f \wedge g} = \{-1, \sqrt{r}\} \rightarrow m = \sqrt{r}$$

-1.

$$D_g = [-1, +\infty)$$

$$(f-g)(r) = r + n - \sqrt{r} = 4\sqrt{r} \rightarrow n = 4\sqrt{r} - r$$

$$m + n = 4\sqrt{r} + \Delta$$