

ایلا فیروزی

$$f(x) = \begin{cases} a + \sqrt{x} & x < 1 \\ b\sqrt{x} & x \geq 1 \end{cases} \quad 1. \text{ دد } = \text{ منسوخ چتر شویست.}$$

$$b\sqrt{x} \rightarrow b \times \left(\frac{r}{r}\right) = b \times \frac{r}{r}$$

$$a + b = a + b - 1 = \frac{r}{r} - 1 = \frac{1}{r} \quad a + b = \frac{r}{r} + \frac{1}{r} = 2$$

$$(f \circ g)'(1) = \frac{13x - 41}{\sqrt{2x}} - \frac{\sqrt{2x^2 + 4x + 3} + \sqrt{2x}}{\sqrt{2x}} \quad 4.$$

$$\frac{13x - 41 - \sqrt{2x^2 + 4x + 3} + \sqrt{2x}}{\sqrt{2x}} = \frac{-\sqrt{2x^2 + 4x + 3} + \sqrt{2x}}{\sqrt{2x}} = -\sqrt{2x} x^{-\frac{1}{2}}$$

$$(-\sqrt{2x}) \left(-\frac{1}{4}\right) x^{-\frac{1}{2}} = \frac{\sqrt{2x}}{4}$$

$$b = \frac{1}{a^n} \rightarrow ba^n = 1 \quad 5.$$

$$ba + c = \frac{1}{a} \rightarrow ba^2 + ac = 1 \rightarrow 1 + ac = 1 \rightarrow ac = 0$$

$$b = b + (a-a)^m \quad 6. \text{ بلر مقدارها برابر باشند اما منسوخ ها نابرابر باشند}$$

$$a = a \text{ هر وقت } m \text{ هر وقت } m$$

$$0 \neq m(a-a)^{m-1} \times 1 \rightarrow m-1 = 0 \rightarrow m = 1 \quad [m=1] \quad \text{چنانچه مقدار صفر (m) تابع می تواند صفر شود}$$

$$(f \circ g)'(n) = \frac{1}{\sqrt{2^{n-1} - 1}} - \frac{1}{\sqrt{2^{n-1}}} \quad 7.$$

$$\frac{1}{2} \rightarrow x \rightarrow (f \circ g)'(n) = 1 \rightarrow (f \circ g)'(\sqrt{2}) = 1$$

$$f'(w) = a \quad .4$$

$$f(w) = -a + 0 \cdot w \quad \rightarrow \quad -a + 0 \cdot w = -a \quad \text{و } a = -w$$

$$f(w) = \frac{9}{w} - \frac{10}{w} + \frac{-1}{w} \quad \rightarrow \quad \frac{1}{w} - \frac{1}{w} = \frac{0}{w} = 0$$

$$f(w) = \frac{w}{w} = 1$$

$$g'(x) = \frac{-xw}{w^2 \sqrt{(w-1)^2}} = \frac{-xw}{w^2 \sqrt{(w-1)^2}} = -\sqrt{w} \quad .5$$

$$g\left(\frac{\sqrt{w}}{w}\right) = \frac{1}{\sqrt{\frac{1}{w}}} = \sqrt{w} \quad , \quad f'(x) = f'\left(x + \frac{1}{x}\right) \times \left(x + \frac{1}{x}\right) = 4x \quad .6$$

$$\frac{1\sqrt{w} \times 4x}{-1\sqrt{w}} = -4x$$

$$f(x+1) + f(x+1) \cdot x^{-p} = f(x+1) + f(x+1) \Rightarrow f(-1) + f(x) \quad .7$$

$$\Rightarrow g'(-1) = f'(-1) + \frac{f'(x)}{f'(-1)} = \frac{p f'(-1)}{f'(-1)} = p \times \frac{w}{w} = p$$

$$\frac{f(0) - f(0-h)}{h(0-h)} = \frac{f(0-h) - f(0)}{0-h} = \frac{f(0-h) - f(0)}{-h} = -\frac{f(0)}{h} \quad .8$$

$$f(0) = (0-1) \sqrt{0+1} = -1 \quad , \quad f'(0) = \frac{1}{\sqrt{0+1}} = 1 \quad , \quad (2-1) \left(\frac{1}{\sqrt{2+1}} \right) = \frac{1}{\sqrt{3}} = \frac{1}{\sqrt{3}}$$

$$\frac{f(0)}{0} = \frac{0}{1} = 0$$

$$4y - 1 = 1 \Rightarrow y = \frac{1}{4} \quad , \quad \text{و } y = \frac{1}{4} \quad .9$$

$$x^2 = 1 \Rightarrow x = 1 \quad , \quad x = -1 \quad , \quad x = 1 \quad , \quad x = -1$$

$$y = (1)^2 - 1 + 0 = 0 \quad , \quad (1, 1)$$