

$$r f(0) = f(-r) + a$$

$$r((a+r)(v)) = ra - \Sigma + a$$

$$12a + 12 = 9a - \Sigma$$

$$10a = -12 \quad a = -\frac{12}{10}$$

$$a = -\frac{12}{10}$$

$$f(r - \sqrt{r}) + f(r + \sqrt{r}) = ?$$

$$f(n) = \left(\sqrt{n} + \frac{1}{\sqrt{n}} \right)^r$$

$$f(r - \sqrt{r}) = \left(\sqrt{r - \sqrt{r}} + \frac{1}{\sqrt{r - \sqrt{r}}} \right)^r$$

$$\sqrt{r - \sqrt{r}} + \frac{1}{\sqrt{r - \sqrt{r}}} + r$$

$$f(r + \sqrt{r}) = \left(\sqrt{r + \sqrt{r}} + \frac{1}{\sqrt{r + \sqrt{r}}} \right)^r$$

$$\sqrt{r + \sqrt{r}} + \frac{1}{\sqrt{r + \sqrt{r}}} + r$$

جمع

$$\Sigma + \sqrt{r + \sqrt{r}} + \sqrt{r - \sqrt{r}} + \frac{\sqrt{r + \sqrt{r}} + \sqrt{r - \sqrt{r}}}{\sqrt{\Sigma - r}}$$

$$\Sigma + r\sqrt{r + \sqrt{r}} + r\sqrt{r - \sqrt{r}}$$

$$= \Sigma + r\sqrt{4}$$

$$(\sqrt{r + \sqrt{r}} + \sqrt{r - \sqrt{r}}) = ? \quad r + \sqrt{r} + r - \sqrt{r} + r = 9 = \sqrt{9}$$

$$r \times r f(n) - r f(-n) = \Sigma n^r - n$$

$f(n)$ - 3

← $\sigma(n)$ Σ steps, m is like (I

$$r \times r f(-n) - r f(n) = \Sigma n^r + n$$

$$\Sigma f(n) = 9 f(-n) = 12n^r - rn$$

steps, n is like (I

$$9 f(-n) - 9 f(n) = 12n^r + rn$$

$$-8 f(n) = 10n^r + n$$

$$f(n) = -\frac{f(n)^r - n}{8}$$

$$f(0) = 9$$

$$(n+1) \times f(n) - r n f(n+1) = \Sigma n^r - m n^r + r m - 1$$

$$f_0 = r f(0) = \frac{r m - 1}{r}$$

$$f(-r) = 9 f(0) = 12 + r m + r m - 1$$

$$10 + am$$

$$9 \left(\frac{r m - 1}{r} \right) = 10 + am$$

$$\Sigma m = 12$$

$$m = \frac{9}{r}$$

$$f(0) = \frac{r m - 1}{r} = \frac{\frac{r^2}{r} - 1}{r} = \frac{r a}{\Sigma}$$

$$\frac{r a}{\Sigma}$$

از ردهم سید B

پارسا محمدی

$$f(n) = an + b$$

$$f\left(\frac{1}{n}\right) = \frac{a}{n} + b$$

$$f(n) + f\left(\frac{1}{n}\right) = \frac{3n^2 - 12n + 3}{n}$$

-8

$$an + b + \frac{a}{n} + b = an + \frac{a}{n} + 2b$$

$$\frac{3n^2 - 12n + 3}{3n^2} \mid \frac{n}{3n - 12 + \frac{3}{n}}$$

$$an + \frac{a}{n} + 2b = 3n - 12 + \frac{3}{n}$$

$$a = 3$$

$$b = -9$$

$$f(-1) = 3(-1) - 9 = -12$$

$$f(n) = n - 1\sqrt{1-n}$$

$$1-n \geq 0 \quad n \leq 1$$

-9

D هم برابرند

$$g(n) = -\sqrt{(1-n)^3} \quad (1-n)^3 \geq 0 \quad 1-n \geq 0 \quad n \leq 1$$

$$\sqrt{(1-n)^2(1-n)}$$

و پس برابرند

$$n \leq 1$$

$$n - 1\sqrt{1-n}$$

$$f(n) = n\sqrt{x}$$

$$D = n \geq 0$$

$$n\sqrt{x}$$

-10 برابرند

$$= \sqrt{n^2 x}$$

$$n$$

$$\sqrt{n^2 x} = |n| \times \sqrt{x}$$

← چون $n \geq 0$ پس $|n| = n$ و تابع با هم برابرند

$$f(n) = [\sqrt{n} - [\sqrt{n}]] \quad x \geq 0$$

-11

$$g(n) = \sqrt{n - |n|} \quad n - |n| \geq 0$$

$$\sqrt{x} [\sqrt{x}] \quad \text{I دانی}$$

$$0 \leq B \leq 1$$

$$|n| \leq n$$

$$n \geq 0$$

$$[\sqrt{n}] - [\sqrt{n}] \rightarrow n \geq 0 \rightarrow \text{همواره صفر}$$

برابرند

$$\sqrt{n - |n|} \rightarrow n \geq 0 \rightarrow \text{همواره صفر}$$

$$f = \{ (1, 2), (2, 3), (3, 1), (0, 0) \}$$

$$g = \{ (-1, 1), (1, 1), (2, 3), (3, 5), (0, 2), (1, 5) \}$$

-9

$$\frac{f+g(1)}{f-g} = (1), \frac{2+1}{2-1} \rightarrow \Delta \text{ (2) }$$

$$\frac{f+g}{f-g}(r) = (r) \rightarrow \frac{3+3}{3-3} \rightarrow \Delta \text{ تعریف نشود } \rightarrow \text{ صفر}$$

$$f(0)g(-1) = (1)(2) = 1$$

$$f = \{ (2, 1), (-1, 4), (0, 5), (-2, 2), (3, -1) \} - 10$$

$$g(m) = f(r_{m-1})g(m) \rightarrow \left\{ \left(-\frac{1}{3}, 2\right), (0, 2), \left(\frac{1}{3}, 5\right), \left(\frac{2}{3}, -1\right) \right\}$$

$$r_{m-1} = + \rightarrow 2, 3 \quad - \rightarrow 1, 0, -2$$

$$h(m) = f(1, m) \rightarrow h(-2) = f(1-2, 1) = f(-1, 1)$$

$$h(m) = \{ (-3, -1), (-2, 2), (0, 5), (2, 1), (3, -1) \}$$