

$$[2, 1]$$

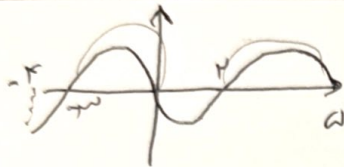
$[-1, 0] \checkmark \rightarrow$ خدای عز و جل
چون - خنثی می گردد

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

$$x f(x) \geq 0$$

$$x \neq -1$$

$$x = [-1, 0] \cup [2, 1]$$



$$\rightarrow (-3, 0) \cup (0, 2)$$

$$\text{معرکه}$$

$$y = \sqrt{\frac{-x}{f(x)}}$$

$$\frac{-x}{f(x)} \geq 0$$

$$f(x) \neq 0 \rightarrow (-3, 0) \cup (0, 2)$$

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

$$-f(x) = \frac{x^2 - x f(x) + x}{-x}$$

$$\frac{f(-x) - 1}{-f(x)} = 1 \rightarrow f(x) = -1$$

$$f(x) - x f(x) =$$

$$x^2 - x f(x)$$

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

$$f(-x) = 1 - x$$

$$x < 0 \rightarrow x - x = 0$$

$$f(0) = 0 - \sqrt{0+1} = -1$$

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

$$x > 2$$

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

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

$$f(f(1)) = f(2) = 4$$

$$x + 2 = 9$$

$$f(n) = an^2 - bn + 1$$

$$f(n-1) - f(n) = 4n + 1$$

$$f(n-1) = a(n^2 - 2n + 1) - bn + 1 + 1 = an^2 - 2an + a - bn + 1 + 1$$

$$f(n-1) - f(n) = (an^2 - 2an + a - bn + 1 + 1) - (an^2 - bn + 1) = -2an + a - b + 1$$

$$\rightarrow -2an + a + 1$$

$$-2a = 4 \rightarrow a = -2$$

$$a + b = 1$$

$$-2 + b = 1 \rightarrow b = 3$$

$$a - b = -2 - 3 = -5$$

$$\frac{r f(r) + f(1)}{f(r)}$$

$$f(r) = r^r - r(r) + 1 = r - r + 1 = 1$$

$$f(w) = w^w - w(w) + 1 = 9 - 9 + 1 = 1$$

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

$$f(-1) = -1)^r - r(-1) + 1 = -1 + r + 1 = r$$

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$$\frac{r f(r) - r f(-r)}{f(r)}$$

$$r \leq r$$

$$f(r) = r(r) + 1 = r$$

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

$$f(r) = r(r) + 1 = r$$

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

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

$$= \frac{r - r}{r - r} = \frac{0}{0} \rightarrow \textcircled{0}$$

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$$f(n) = \frac{n^r + f(n) + 9}{n^r + f(n) + 1} \rightarrow \frac{(n+r)^r + 1}{n^r + f(n) + 1} = ?$$

$$n = \sqrt{r} - r$$

$$\rightarrow (\sqrt{r} - r)^r + 1 = r + 1 = f$$

$$(\sqrt{r} - r)^r + 1 \rightarrow \textcircled{1}$$

$$f(r) = \frac{r^r + f(r) + 9}{r^r + f(r) + 1} = \frac{r}{1+r}$$

$$\frac{1}{r} = r \rightarrow f(n) = r$$

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

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

$$f(n) = n^{\frac{1}{n}} \rightarrow \frac{(n^{\frac{1}{n}})^r}{n^{\frac{1}{n}}} = \frac{n^{\frac{r}{n}}}{n^{\frac{1}{n}}} = n^{\frac{r-1}{n}}$$

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