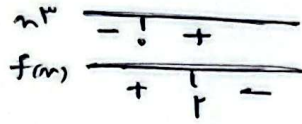


14,50

البيان التالي - لا يجوز

1,0

نوع 1: $y = \sqrt{n^r f(n+1)}$ $f(n) = \left(\frac{1}{r}\right)^{n-r} - 1$ تقريب



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

$D_f = [0, 1]$



$\frac{n-r}{2-1}$

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

نوع 2: $f(-n) = \sqrt{n + |-n+r|}$

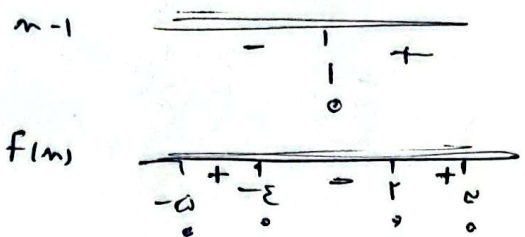
1,0

$n > r : -n - r + r = -n$

$n < r : -n - n + r = -2n + r$

$D_f = (-\infty, 1]$

$-2n + r > 0 \Rightarrow n < \frac{r}{2}$



نوع 3: $y = \sqrt{\frac{n-1}{f(n)}}$

$D_f = (-1, 1) \cup (r, \infty)$

5

$y = \frac{1}{n^r - \epsilon n^r - \epsilon n - \epsilon}$

$y_1 = \frac{1}{n^r - \epsilon n^r - \epsilon n - \epsilon}$

5

$a = -1$
 $b = -\epsilon$

$\sqrt{-(-1-\epsilon)} = \frac{r}{2}$

$\frac{n^r - \epsilon n^r + 1}{(n^r - 1)^2} = \frac{n^r - \epsilon n^r - r}{-(n+r)^2}$

$n^r - 1 = n + r$
 $n^r - n - r = 0$

1,0

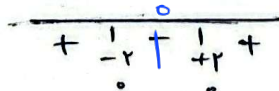
$y = \sqrt{[n^r - \epsilon][n^r + \epsilon n^r + 1]}$

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نوع 4: $y = \sqrt{f(n) - f(\frac{\epsilon}{n})}$ $f(n) = n^r + n$ تقريب

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

$n^r - \epsilon f = (n^r - r)(n^r + \epsilon n^r + 1)$
 $(n-r)(n+r)$



$D_f = \mathbb{R} - (-r, r)$

$D_f = [-r, r] \cup [r, \infty)$

$$0+1 = 1 = \cancel{r} = f(r) + f(1) \text{ دلو لول } f(r^2+m) = r^2-1 \text{ لول } (9)$$

$$\frac{(1)^{e+1}}{1} \quad \frac{(r)^{e+r}}{1}$$

10

$$f(1) = r(r) - 1 = \checkmark$$

$$\textcircled{f} = \frac{2(\sqrt{r}-r)}{f(\sqrt{r+r})}$$

$$\text{دلو لول } g(m) = m^2 + 9mr + r^2m \text{ و } f(m) = m^2 - 9mr + 10m \text{ لول } (5)$$

$$\frac{-r}{1} = -r$$

1

~~مستعمل~~

$$(n+r)^2 = g(m) + r$$

$$g(m) = (n+r)^2 - r$$

~~مستعمل~~

~~مستعمل~~

$$f(m) + c = (m-r)^2$$

$$f(m) = (m-r)^2 + 1$$

$$f(m) + g(m) = a + b\sqrt{m+c} \text{ و } f(m) = \sqrt{m-5}\sqrt{m-5} \text{ و } g(m) = \sqrt{m-5}\sqrt{m-5}$$

$$\begin{aligned} c &= -5 \\ b &= r \\ a &= 0 \end{aligned}$$

$$\frac{r+0}{-5} = \left(-\frac{1}{r}\right)$$

$$\sqrt{(\sqrt{m-5}-r)^2}$$

$$\sqrt{(\sqrt{m-5}+r)^2}$$

$$(m, r) \text{ دلو لول } g_f \text{ دلو لول } g(m) = \{(r, 1), (1, 0), (0, 0), (0, 5)\} \quad f(m) = \frac{m+r}{m^2-fm+c} \text{ لول } (9)$$

$$g_f(m) = \left\{ \left(r, -\frac{1}{-5}\right), \left(0, \frac{1}{r}\right) \right\}$$

5

$$g(m) = \{(-1, 0), (1, -1), (5, 2), (-1, 2)\} \text{ و } f(m) = \{(1, 2), (5, -1), (5, 2), (-1, 2)\}$$

$$f(r) = \{(1, 2), (5, -1), (5, 2), (-1, 2)\}$$

$$f(m^2) = \{(1, 2), (-1, 2), (\sqrt{5}, -1), (-\sqrt{5}, -1), (5, 2), (-5, 2)\}$$

$$g^r(m)+1 = \{(-1, 1), (1, 3), (3, 9), (-1, 1)\}$$

5

$$\frac{rf}{g} = \left\{ \left(r, -\frac{r}{r}\right), \left(1, \frac{r}{-1}\right) \right\}$$