

$$(a-r)n^r + an + b = 0 \quad \xrightarrow{n=r} = 0$$

$$a(a-r)^r + ra + b = 0$$

$$a(a-r)^r + ra + b = 0$$

$$b = 18 - 12a$$

جواب

$$n^r + rn + r - m^r = (n+1)^r + 1 - m^r$$

$$(n+1)^r + 1 - m^r \geq 0$$

$$1 - m^r \geq 0$$

$$1 \geq m^r \rightarrow -1 \leq m \leq 1$$

اختلاف بینین و کترین:
 $1 - (-1) = 2$
 جواب

$$x - n^r \geq 0$$

$$x \geq n^r \rightarrow -r \leq n \leq r$$

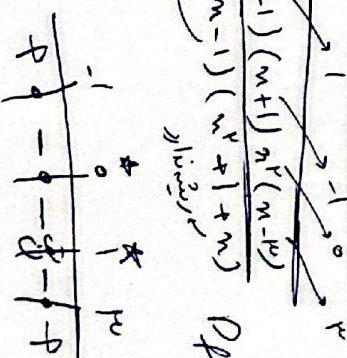
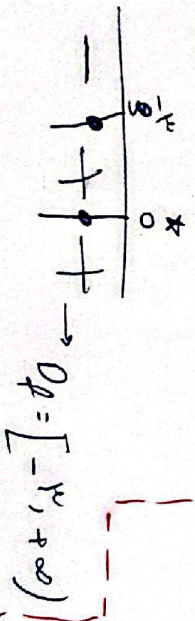
$$[n] + [-n] + 1 \neq 0 \rightarrow [n] + [-n] + 1 = 0$$

$$[n] + [-n] = -1 \Rightarrow n \notin \mathbb{Z}$$

بسیار آسان است. $n \in \mathbb{Z}$

$$n^r + rn \geq 0$$

$$n^r(n+r) \geq 0$$



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

$$D_f = (-\infty, -1] \cup \{1\}$$

$$|n-r| - r \geq 0$$

$$|n-r| \geq r$$

$$\begin{cases} n-r \geq r \rightarrow n \geq 2r \\ n-r \leq -r \rightarrow n \leq -1 \end{cases}$$

$$D_f = (-\infty, -1] \cup [2r, +\infty)$$

$$r - |r-m| \geq 0$$

$$r \geq |r-m|$$

$$D_f = [-r, r]$$

ا) $| -n | n | > 0$
 $| > n | n |$

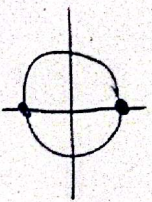
$D_f = (-\infty, 1]$

ب) $| -n - a | - 1 > 0$
 $| n - a | < 1$

$-1 < n - a < 1$
 $n < n + a < n + 2$

$D_f = (n, n+2)$

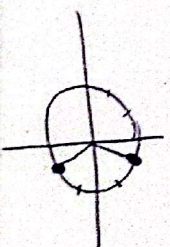
ا) $\cos x \neq 0$



$D_f = \mathbb{R} - \left\{ k\pi + \frac{\pi}{2} \right\}$

ب) $\cos x - 1 \neq 0$

$\cos x \neq 1$



$D_f = \mathbb{R} - \left\{ 2k\pi, 2k\pi + 2\pi \right\}$

ا) $| r_{n+1} | - | n + r | = 0$

$| r_{n+1} | = | n + r |$

$r_{n+1} + r_{n+1} = n + r + n + r$

$r_{n+1} - r_{n+1} = 0$

$n - r_{n+1} - r_{n+1} = 0$

$(n - r)(n + r) = 0$

$\log \frac{n-r}{n+r} = \log \frac{n-r}{n+r}$

$\log_{10} (r_{n+1})$

$\log_{10} 0$

$\log_{10} 0$

$\log_{10} 0$

$\log_{10} 0$

$r_{n+1} < r$

$r_{n+1} < r \rightarrow n < r$

ب) $| r_{n+1} | - | n + r | > 0$

$| r_{n+1} | > | n + r |$

$r_{n+1} + r_{n+1} > n + r + n + r$

$r_{n+1} - r_{n+1} > 0$

$n - r_{n+1} - r_{n+1} > 0$

$(n - r)(n + r) > 0$

$\log \frac{n-r}{n+r} = \log \frac{n-r}{n+r}$

$\log_{10} (r_{n+1})$

$\log_{10} 0$

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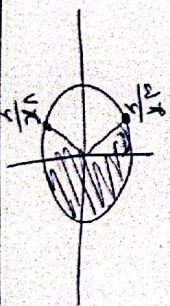
$\log_{10} 0$

$\log_{10} 0$

ا) $r \cos n + 1 > 0$

$r \cos n > -1$

$\cos n > -\frac{1}{r}$



$D_f = \left(r\pi - \frac{r\pi}{r}, r\pi + \frac{r\pi}{r} \right)$

$\frac{n-1}{n+1} > 1 \rightarrow \frac{-r}{n+1} > 0$

$n < -1$

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