

کلاس و سرکار  
تاریخ

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$$(الف) \theta =$$

$$\frac{x^{n+1} + x + 1}{x^2 + 2x + 1} = 1 + x^2$$

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$$(x^2 + 2x + 1) \cdot (1 + x^2) = x^2 + 2x + 1 + x^4 + 2x^3 + x^2 = x^4 + 2x^3 + 2x^2 + 2x + 1$$

$$\frac{x^2 + 2x + 1}{x^2 + 2x + 1} = 1 + x^2$$

$$a \leq b^2 - 2ac = 1 - 2 \times 1 \times 1 = -1$$

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الف)  $|x_{n+1} - x_n| = 0$   
 $x = x \quad D = R - \{-x\}$

ب)  $|x_{n+1} - x_n| = 0$   
 ~~$|x_{n+1} - x_n| = 0$~~

$|x_{n+1}| - |x_n| \geq 0$   
 $|x_{n+1}| \geq |x_n|$

$x \geq 2 \quad I$

$x \geq -\frac{1}{2} \quad II$

$x_{n+1} \geq x_n$   
 $x_{n+1} \geq x_n + \frac{1}{2^n}$   
 $x_{n+1} \geq x_n$   
 $x_{n+1} \geq x_n + \frac{1}{2^n}$   
 $x_{n+1} \geq x_n$   
 $x_{n+1} \geq x_n + \frac{1}{2^n}$

$I \cap II = I \rightarrow [2, +\infty)$

الف)  $1 - \log_2 x > 0 \Rightarrow 1 > \log_2 x \Rightarrow x < 2$   
 $x > 0$   
 $D = (0, +\infty) \cap (-\infty, 2) = (0, 2)$

ب)  $1 - \log_2 \frac{1}{x} > 0 \Rightarrow 1 > \log_2 \frac{1}{x} \Rightarrow \frac{1}{x} < 2 \Rightarrow x > \frac{1}{2}$   
 $x > 0$   
 $D = (0, +\infty) \cap (-\infty, \frac{1}{2}) = (0, \frac{1}{2})$

الف)  $\log_{\omega}^{(x_n-1)} \geq 0 \Rightarrow \log_{\omega}^{(x_n-1)} \geq 1 \Rightarrow x_n - 1 \geq \omega \Rightarrow x_n \geq \omega + 1$   
 $\log_{\omega}^{(x_n-1)} > 0 \Rightarrow x_n - 1 > 1 \Rightarrow x_n > 2 \quad II$   
 $x_n - 1 > 0 \Rightarrow x_n > 1 \quad III$   
 $D = I \cap II \cap III = [\omega + 1, +\infty)$





تاریخ:

موضوع:

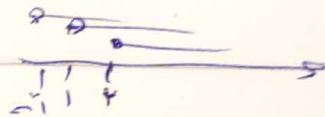
الف)  $\sqrt{\cos x + 1} > 0 \Rightarrow \cos x > -\frac{1}{2}$   ~~$D = (\frac{\pi}{2}, \frac{3\pi}{2})$~~   
 $D = [0, \frac{\pi}{2} + \frac{\pi}{2}] \cup [\frac{3\pi}{2}, 2\pi]$  ✓

$\log_{n+1}^{n-1} \geq 0 \Rightarrow \log^{n-1} \geq 1 \Rightarrow n-1 \geq 1 \Rightarrow n \geq 2$  ✓

$n-1 > 0 \Rightarrow n > 1$  ✓

$n+1 > 0 \Rightarrow n > -1$

$D = K \cap B \cap C = [\frac{\pi}{2}, +\infty)$



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~~$x^2 + 2x + 2 - m^2 \geq 0$~~

$\Delta < 0 \Rightarrow 4 - 4(2 - m^2) < 0$

$4 - 4 + 4m^2 < 0$

$4m^2 - 4 < 0 \Rightarrow m < \pm 1$

$-1 < m < 1$

(1, 0)

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اختلاف

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