

نام و نام خانوادگی نام معلمین پاسخنامه تشریحی تکلیف شماره F کلاس بیازدهم دهنتم B...

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$$(a - 1) = 0$$

$$a = 1$$

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

$$\xrightarrow{\text{ساده ریشه}} 1+b=0$$

$$b = -1$$

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$$a = 1$$

$$b = 1$$

$$c = 1 - m^2$$

}

$$\rightarrow \Delta \leq 0 \rightarrow f - f(1 - m^2) \leq 0$$

$$f - 1 + f m^2 \leq 0$$

$$f m^2 \leq 1 - f$$

$$m^2 \leq \frac{1-f}{f}$$

$$-1 \leq m \leq 1$$

$$\leadsto 1 - (-1) = 2$$

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$$f(x) = \frac{\sqrt{1-x^2}}{[x] + [-x] + 1}$$

$$x \in \mathbb{Z} \checkmark$$

$$-1 \leq x \leq 1 \xrightarrow{x} \text{زیادتر از ۱}$$

$$f - x^2 \gg 0$$

$$f \gg x^2$$

$$-1 \leq x \leq 1$$

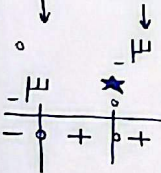
$$D_f = [-1, 1]$$

بین عدد صحیح

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$$\text{الف) } \sqrt{x^2 + 3x}$$

$$x^2(x+3) \geq 0$$



$$D_f = [-3, +\infty)$$

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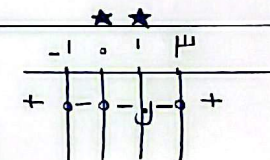
$$\text{ب) } \sqrt{(x^2-1)(x^2-3x)}$$

$$(x^2-1)(x^2-3x) \geq 0$$

$$(x-1)(x+1)x(x-3) \geq 0$$

$$(x-1)(x^2+x+1)$$

$$D_f = (-\infty, -1] \cup [3, +\infty) \cup \{0\}$$



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$$\text{الف) } \sqrt{|x-1|-3}$$

$$|x-1|-3 \geq 0$$

$$|x-1| \geq 3$$

$$x-1 \geq 3 \text{ یا } x-1 \leq -3$$

$$x \geq 4 \text{ یا } x \leq -2$$

$$\text{ب) } \sqrt{1-|x-1|}$$

$$1-|x-1| \geq 0$$

$$1 \geq |x-1|$$

$$-1 \leq x-1 \leq 1$$

$$0 \leq x \leq 2$$

$$D_f = [0, 2]$$

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$$D_f = (-\infty, -1] \cup [0, +\infty) \text{ و } 4 \geq x \geq -4$$

صورت سوال را شبیه نرست! $\sqrt{3-1n-5} - 1 \geq 0$ $\sqrt{3-1n-5} - 1 \neq 0$

الف) $\sqrt{1-2x}|x|$
 $1-2|x| \geq 0$
 $1 \geq 2|x|$
 $D_f = (-\infty, 1]$

ب) $\frac{1}{\sqrt{3-|x-5|-1}}$
 $3-|x-5|-1 > 0$
 $2 > |x-5|$
 $-2 < x-5 < 2$
 $3 < x < 7$
 $D_f = (3, 7)$

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الف) $y = \frac{\sin^2 x - 1}{\cos x}$
 $\cos x \neq 0$
 $D_f = \mathbb{R} - \{k\pi + \frac{\pi}{2}\}$

ب) $y = \frac{\cos x}{\mu \cos x - 1}$
 $\mu \cos x \neq 1$
 $\cos x \neq \frac{1}{\mu}$
 $D_f = \mathbb{R} - \{k\pi \pm \frac{\pi}{\mu}\}$

الف) $\frac{x+\mu}{|\mu x+1| - |x+\mu|}$
 $|\mu x+1| \neq |x+\mu|$
 $\mu x+1 \neq x+\mu \rightarrow x \neq \mu$
 $\mu x+1 \neq -x-\mu \rightarrow x \neq -\frac{\mu+1}{\mu+1}$
 $D_f = \mathbb{R} - \{\mu, -\frac{\mu+1}{\mu+1}\}$

ب) $\sqrt{|\mu x+1| - |x+\mu|}$
 $|\mu x+1| \geq |x+\mu|$
 $(\mu x+1)^2 \geq (x+\mu)^2$
 $\mu^2 x^2 + 2\mu x + 1 \geq x^2 + 2\mu x + \mu^2$
 $(\mu^2 - 1)x^2 \geq \mu^2 - 1$
 $(\mu-1)(\mu+1)x^2 \geq (\mu-1)(\mu+1)$
 $D_f = (-\infty, -\frac{\mu+1}{\mu+1}] \cup [\mu, \infty)$

$f(x) = \sqrt{\log_{\omega} \log_{\omega}^{(\mu x-1)}}$
 $\log_{\omega} \log_{\omega}^{(\mu x-1)} \geq 0$
 $\log_{\omega}^{(\mu x-1)} > 0$
 $\mu x-1 > 0$
 $\mu x > 1$
 $x > \frac{1}{\mu}$
 $D_f = I \cup II \cup III \rightarrow [\frac{1}{\mu}, \infty)$

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الف) $\log(\mu \cos x + 1)$
 $\mu \cos x + 1 > 0$
 $\mu \cos x > -1$
 $\cos x > -\frac{1}{\mu}$

ب) $\sqrt{\log \frac{x-1}{x+1}}$
 $\log \frac{x-1}{x+1} \geq 0$
 $\frac{x-1}{x+1} \geq 1$
 $\frac{x-1-x-1}{x+1} \geq 0$
 $\frac{-2}{x+1} \geq 0$
 $x < -1$
 $D_f = (-\infty, -1)$

$D_f = \mathbb{R} - \{(\mu k\pi + \frac{\mu\pi}{\mu}, \mu k\pi + \frac{\mu\pi}{\mu})\} \cup \{ \frac{-\mu}{x+1} \geq 0 \}$
 $D_f = (-\infty, -1)$

$$4- \text{ب) } 3 - |n-5| \geq 0 \rightarrow |n-5| \leq 3 \rightarrow -3 \leq n-5 \leq 3 \rightarrow 2 \leq n \leq 8$$

$$\sqrt{3 - |n-5|} - 1 \neq 0 \rightarrow \sqrt{3 - |n-5|} \neq 1 \rightarrow 3 - |n-5| \neq 1 \rightarrow |n-5| \neq 2 \rightarrow n \neq 7, 3$$

$$D_f = [2, 8] - \{3, 7\} = [2, 3) \cup (3, 7) \cup (7, 8]$$

$$9) \log_{\frac{1}{5}} \log_5^{2n-1} \rightarrow 2n-1 > 0 \rightarrow n > \frac{1}{2}$$

$$\log_{\frac{1}{5}}^{2n-1} > 0 \rightarrow 2n-1 > 0 \rightarrow 2n-1 > 1 \rightarrow n > 1$$

$$\log_{\frac{1}{5}} \log_{\frac{1}{5}}^{2n-1} \geq 0 \xrightarrow[\text{منه!}]{\text{من بابي دورا}} \log_{\frac{1}{5}}^{2n-1} \leq \left(\frac{1}{5}\right) \rightarrow \log_{\frac{1}{5}}^{2n-1} \leq 1 \rightarrow 2n-1 \leq 5 \rightarrow 2n \leq 6 \rightarrow n \leq 3$$

$$\hookrightarrow D_f = (1, 3]$$