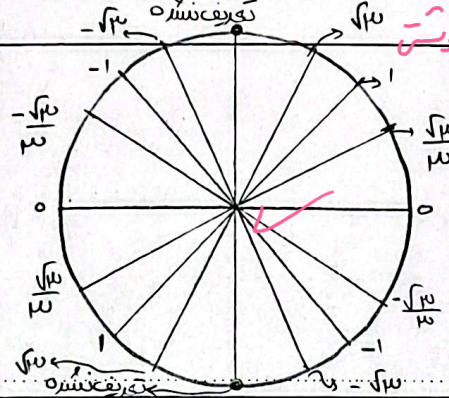


نام و نام خانوادگی ... کلاس ... پاسخنامه تشریحی تکلیف شماره ...



نقطه آبی ضمیمه کامل نوشته
نمونه از D استفاده نده
D و 0 ضمیمه مستتره!

الف) $\sin \frac{\pi}{4} + (\cos \pi + p \tan \frac{\pi}{4}) = \sin \frac{\pi}{4} + (\cos \pi + p \tan \frac{\pi}{4}) = \frac{1}{p} + \frac{-1}{-p} + \frac{p}{p} = \frac{1}{p} + \frac{1}{p} + 1 = \frac{2}{p} + 1$

ب) $-(\cos \frac{\pi}{4} + \sin \frac{\pi}{4}) - p \sin \frac{\pi}{4} = -(\cos \frac{\pi}{4} + \sin \frac{\pi}{4}) - p \sin \frac{\pi}{4} = -\frac{\sqrt{2}}{2} - \frac{\sqrt{2}}{2} - p \frac{\sqrt{2}}{2} = -\sqrt{2} - \frac{p\sqrt{2}}{2}$

ج) $\cot \frac{\pi}{4} + p \cot \frac{\pi}{4} - p \tan \frac{\pi}{4} = \cot \frac{\pi}{4} + p \cot \frac{\pi}{4} - p \tan \frac{\pi}{4} = 1 + p - p = 1$

د) $(\cos(\sin \frac{\pi}{4}) + \sin(\pi \cos \frac{\pi}{4})) = 1 + 1 = 2$

$\cos \frac{\pi}{4} = \frac{\sqrt{2}}{2}$ $\sin(\frac{\pi}{2}) = \sin(\frac{\pi}{2}) = 1$

$f(x) = \begin{cases} x^p + F_n & x \geq a \\ mx + a + r & x < a \end{cases}$ $f(1) = a$

$x = a \Rightarrow a^p + F_n = mx + a + r$

$a^p + a - p \cdot 0 = (a+p)(a-1) = 0 \Rightarrow a = 1$

$a = 1$ $a = 1$

$f(x) = \begin{cases} px^p - b & |x+1| \geq p \\ a + px & -p \leq x < -1 \end{cases}$

$|x+1| \geq p \Rightarrow x+1 \geq p \Rightarrow x \geq p-1$
 $\Rightarrow x+1 \leq -p \Rightarrow x \leq -p-1$

$x = -p \Rightarrow 1 - b = a - 4 \Rightarrow a + b = 4$

الف) $y = \frac{1}{x^p - F_n}$

$x^p(x-F) \Rightarrow x = 0, F = \frac{D}{p} = \frac{1}{p} - \frac{1}{p}$

ب) $y = \frac{1}{p_n x^p + F_n x^p + p_n x + F}$

$p_n x^p(x+p) + p(x+p) = (x+p) \times p \times (x^p + 1)$

$\Rightarrow \frac{D}{p} = \frac{1}{p} - \frac{1}{p}$

کلاس و نام خانوادگی

$$\text{الف) } y = \sqrt{x^2-1} + \sqrt{x-p}$$

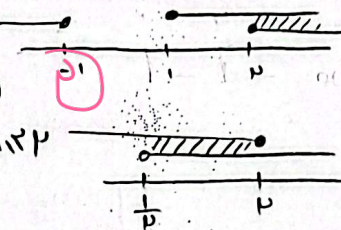
$$x^2-1 \geq 0 \rightarrow x^2 \geq 1 \rightarrow x \geq 1 \rightarrow x \geq p$$

$$x-p \geq 0 \rightarrow x \geq p$$

$$D = [p, +\infty)$$

$$\text{ب) } y = \frac{\sqrt{4-px}}{\sqrt{4x-p}} \rightarrow 4-px \geq 0 \rightarrow 4 \geq px \rightarrow px \leq 4 \rightarrow x \leq \frac{4}{p}$$

$$D = \left[\frac{1}{p}, \frac{4}{p}\right]$$



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$$y = \sqrt{4x-a} + \sqrt{b-px}$$

بصورتی که D: هر دو عبارت در رادیکال ها منفی نباشند

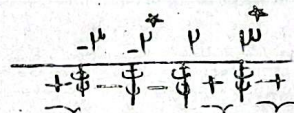
$$x=p \rightarrow 1p-a=0 \rightarrow a=1p$$

$$x=p \rightarrow b-4=0 \rightarrow b=4 \rightarrow \frac{b}{a} = \frac{4}{1p} = \frac{1}{p}$$

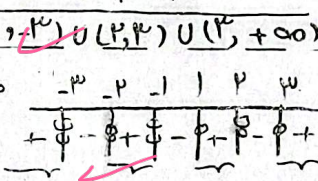
7

$$\text{الف) } y = \sqrt{\frac{x^2-x-4}{x^2-11x^2+p+4}}$$

$$\frac{(x^2-p)(x+p)^{-p}}{(x^2-4)(x^2-F)} \geq 0$$



$$\text{ب) } y = \sqrt{\frac{x^2-px-a}{x^2+px-a}} \rightarrow (x-1)(x^2-x-4) \rightarrow (x-1)(x+p)(x+p) \geq 0$$



$$D = (-\infty, -p) \cup [-p, -1) \cup [1, p) \cup [p, +\infty)$$

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$$\text{الف) } y = \sqrt{p[x]-F} \rightarrow p[x]-F \geq 0 \rightarrow p[x] \geq F \rightarrow [x] \geq \frac{F}{p} \rightarrow D = \left[\frac{F}{p}, +\infty\right)$$

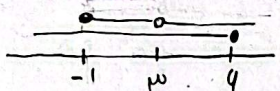
$$\text{ب) } y = \sqrt{p[x]-a} \rightarrow p[x]-a \geq 0 \rightarrow p[x] \geq a \rightarrow [x] \geq \frac{a}{p} \rightarrow [x] \geq \frac{a}{p} \rightarrow D = \left[\frac{a}{p}, +\infty\right)$$

9

$$\text{الف) } y = \sqrt{\frac{x+1}{x-4}} + \sqrt{\frac{4-x}{x^2+p+4}}$$

$$\frac{x+1}{x-4} \geq 0 \rightarrow \frac{-1}{x-4} \geq 0$$

$$\frac{4-x}{x^2+p+4} \geq 0 \rightarrow \frac{4}{x^2+p+4} \geq 0$$

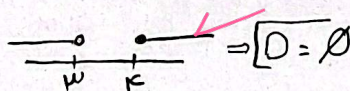


$$D = [1, 4] - \{4\}$$

$$\text{ب) } y = \sqrt{[x]-F} + \sqrt{p-[x]}$$

$$[x]-F \geq 0 \rightarrow [x] \geq F \rightarrow x \geq F$$

$$p-[x] \geq 0 \rightarrow p \geq [x] \rightarrow [x] \leq p \rightarrow x \leq p$$



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$$\frac{x^2-px-a}{x^2+px-a} \geq 0$$

$$\frac{x^2+px-a}{x^2+px-a} \geq 0$$

تقسیم های قسمتی
ب سوال 8: