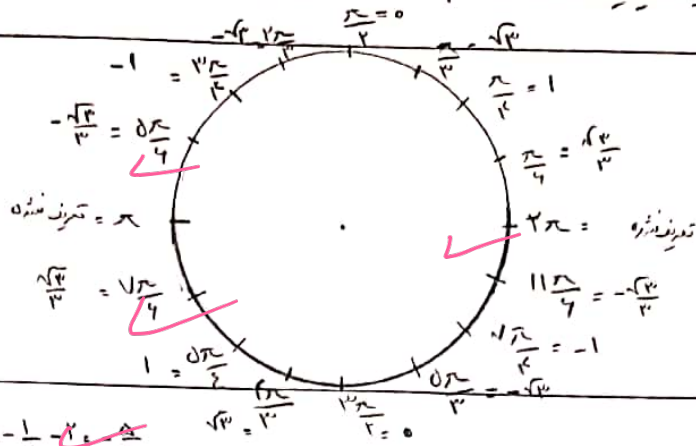


نام و نام خانوادگی پاسخنامه تشریحی تکلیف شماره کلاس یازدهم ریاضی A

$\tan = \frac{\sin}{\cos}$



الف) $\frac{1}{4} - 1 + 2(-1) = -\frac{1}{4} - 2 = -\frac{9}{4}$

ب) $-(-\frac{\sqrt{3}}{4}) + \frac{\sqrt{3}}{4} - 2(-\frac{\sqrt{3}}{4}) = \frac{3\sqrt{3}}{4}$

ج) $-2\sqrt{3} + 3\sqrt{3} - 2(-\frac{\sqrt{3}}{4}) = 2\sqrt{3} + \frac{\sqrt{3}}{2} = \frac{5\sqrt{3}}{2}$

د) $\cos(0) + \sin(\frac{\pi}{4}) = 1 + \frac{1}{\sqrt{2}} = \frac{\sqrt{2} + 1}{\sqrt{2}}$

$f(n) = \begin{cases} n^2 + 2n & n > a \\ 2n + a + 2 & n \leq a \end{cases}$

$n=a \rightarrow a^2 + 2a = 2a + a + 2$
 $a^2 + a - 2 = 0 \rightarrow a + b + c = 0 \rightarrow \begin{cases} a=1, a=-2 \\ a > 0 \end{cases} \Rightarrow a=1$

$f(n) = \begin{cases} n^2 + 2n & n > 1 \\ 2n + 3 & n \leq 1 \end{cases}$

$f(1) = 2(1) + 3 = 5$

$f(n) = \begin{cases} 2n^2 - b & |n+1| \geq 2 \\ a + 2n & -2 \leq n \leq -1 \end{cases}$

① و ② $\rightarrow n = -2$
 $2(-2)^2 - b = a + 2(-2)$
 $18 - b = a - 4$
 $18 + 4 = a + b \rightarrow a + b = 22$

الف) $y = \frac{1}{n^2 - 4n^2}$ $D_f = \mathbb{R} - \{0, 2\}$

ب) $\frac{1}{2n^2 + 4n^2 + 2n + 4} \div 2$
 $2n^2 + 4n^2 + 2n + 4 \neq 0$
 $6n^2 + 2n + 4 \neq 0$
 $3n^2 + n + 2 \neq 0$
 $(n+2)(n+1) \neq 0$
 $n \neq -2, n \neq -1$
 $D_f = \mathbb{R} - \{-2, -1\}$

1.

$$ج-٢) C \cdot t \frac{r_1}{r} + r C \cdot t \frac{r_2}{r} - r b a n \frac{a n}{y} = -\sqrt{\frac{r}{r}} + 3\left(\sqrt{\frac{r}{r}}\right) - 2\left(-\sqrt{\frac{r}{r}}\right) = \frac{4\sqrt{r}}{r}$$

(١٠-الف) $y = \sqrt{\frac{n+1}{|n-4|}} + \sqrt{\frac{4-n}{n^2+2n+2}}$

نقطة مفردية! $\frac{n+1}{|n-4|} \geq 0 \rightarrow n \geq -1, n \neq 4 \quad I$

$\frac{4-n}{n^2+2n+2} \geq 0 \rightarrow n \leq 4 \quad II$

لـ $\Delta < 0$ ، معادله مثبت وبدون مفردية

$I \cap II \rightarrow D_f = [-1, 4) \cup (4, 4] \subseteq [-1, 4] - \{4\}$