

نام و نام خانوادگی:

شماره پرسنلی:

واحد:

۱۹۱۵
امین

عنوان شغل:

کد شغل:

موضوع گزارش:

هستی برزعلی

$\frac{5\pi}{3} \rightarrow \frac{1}{\sqrt{3}} \rightarrow \frac{\sqrt{3}}{3}$

$40 \rightarrow \sqrt{3}$

$40 \rightarrow 1$

$140 \rightarrow -\sqrt{3}$

$90 \rightarrow 0$

$150 \rightarrow -\frac{1}{\sqrt{3}}$

$140 \rightarrow -1$

$210 \rightarrow \frac{1}{\sqrt{3}}$

$110 \rightarrow +0$

$240 \rightarrow +\sqrt{3}$

$220 \rightarrow +1$

$300 \rightarrow -\sqrt{3}$

$270 \rightarrow 0$

$330 \rightarrow -\frac{1}{\sqrt{3}}$

$310 \rightarrow -1$

$340 \rightarrow 0$

2

الف) $\sin \frac{\pi}{4} + \cos \pi + 2 \tan \frac{3\pi}{4} \rightarrow \frac{1}{\sqrt{2}} + (-1) + (-2) = -\frac{1}{\sqrt{2}}$ ✓

ب) $-\cos \frac{5\pi}{4} + \sin \frac{2\pi}{3} - 3 \sin \frac{\pi}{6} \rightarrow \frac{\sqrt{2}}{2} + \frac{\sqrt{3}}{2} - 3 \left(\frac{1}{2} \right) = \frac{\sqrt{2} + \sqrt{3} - 3}{2}$ ✓

ج) $\cot \frac{2\pi}{3} + 3 \cot \frac{\pi}{4} - 2 \tan \frac{\pi}{6} \rightarrow \frac{-1}{\sqrt{3}} \times \frac{\sqrt{3}}{3} + 3 \times 1 - 2 \times \frac{1}{\sqrt{3}} = -\frac{1}{3} + 3 - \frac{2}{\sqrt{3}} = \frac{-1 + 9\sqrt{3} - 2}{3\sqrt{3}}$

د) $\cos(\sin x) + \sin(x \cos \frac{\pi}{6}) \rightarrow 1 + \sin \frac{\pi}{6} \rightarrow 1 + \frac{1}{2} = \frac{3}{2}$

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

مسئول آموزش ناحیه

دفتر فنی واحد

نام و نام خانوادگی مدیر

اصلاحیه: ۱

کد فرم: ۶۰۰۶-۹۲۷۰۹

$x \rightarrow a \rightarrow a^p + ka = 1a + p \rightarrow a^p \rightarrow a^p + a - p = 0 \rightarrow (a+p)(a-1)$
 $x \rightarrow 1 \rightarrow x^p + kx \rightarrow \overline{0}$
 $a \rightarrow 1 \rightarrow p(1) + 1 + p \rightarrow \overline{0}$

$|x+1| \leq p \rightarrow x+1 \leq p \leq x+1 \leq -p$
 $x \geq 1$
 $\frac{x^p - p}{x^p - p} \rightarrow f(-p) = p(-p)^p - b \rightarrow 11 - b$
 $a + p(-p) \rightarrow a - p \rightarrow 11 - b = a - p \rightarrow 11 + p = a + b \rightarrow a + b = \overline{p}$

$y = \frac{1}{x^p - kx^p} \rightarrow x^p(x - k) \neq 0 \rightarrow Df = \mathbb{R} - \{0, k\} \cup (-\infty, 0) \cup (0, k) \cup (k, \infty)$

$y = \frac{1}{px^p + kx^p + px + k} \rightarrow \frac{1}{p(x^p + 1) + p(x + 1)}$
 $p(x^p + 1) + p(x + 1)$
 $(x+p)(px^p + p) \rightarrow p(x+p)(x^p + 1) \rightarrow p(x+p)(x^p + 1) \neq 0 \rightarrow x+p \rightarrow x = -p$

$y = \sqrt{x^p - 1} + \sqrt{x - p} \rightarrow x \geq p$
 $x^p - 1 \geq 0 \rightarrow x^p \geq 1 \rightarrow x \geq \pm 1$

$\cap \rightarrow (x \leq -1 \leq x \geq 1) \cap (x \geq p) \rightarrow [p, +\infty)$

$y = \frac{\sqrt{4 - px}}{\sqrt{4x - p}} \rightarrow x \geq p$
 $\frac{1}{-1/p} + \frac{1}{1/p} \rightarrow Df = [\frac{1}{p}, 2]$

$Df \rightarrow y = \sqrt{4x - a} + \sqrt{b - px} \rightarrow \{p\}$
 $x \leq \frac{a}{4}$
 $x \leq \frac{b}{p} \rightarrow [\frac{a}{4}, \frac{b}{p}] \rightarrow \frac{a}{4} = p \rightarrow a = 4p$
 $\frac{b}{p} = p \rightarrow b = p^2 \rightarrow \frac{b}{a} = \frac{1}{p}$

الف- ٨) $y = \sqrt{\frac{n^2 - n - 4}{n^4 - 13n^2 + 34}} \leadsto \frac{n^2 - n - 4}{n^4 - 13n^2 + 34} \geq 0 \leadsto \frac{(n-4)(n+1)}{(n^2-9)(n^2-4)} \geq 0$

$\frac{(n-4)(n+1)}{(n-3)(n+3)(n-2)(n+2)} \geq 0 \leadsto$

-3	-2	2	3	
$+$	$-$	$-$	$+$	$+$

$D_f = (-\infty, -3) \cup (-2, 2) \cup (3, +\infty)$