

نوین کنکور

کنکور

امتحان نهایی

**نوین کنکور
شرط لازم و کافی
برای موفقیت**

novinkonkor.com

(111) $A = \frac{\sqrt[3]{r\sqrt{a}}}{\sqrt[3]{r\sqrt{r}} \times 16^{-\frac{1}{6}}} = \frac{\sqrt[3]{r \times r \sqrt{r}}}{\sqrt[3]{r\sqrt{r}} \times (r^4)^{-\frac{1}{6}}} = \frac{\sqrt[3]{r}}{r^{-\frac{2}{3}}} = r^{\frac{1}{3} + \frac{2}{3}} = r^1 = r = \sqrt[3]{r^3} = \sqrt[3]{8} = 2$

(2) صحیح

(112) $\{1, r, r^2\}, \{r^2, \dots, 1, r^2\}, \{1, r^4, \dots, r^4\}, \{r^4, \dots, 1, r^4\}$
 دیکھو، پھر، پھر، پھر

پھر، $\{1, r, r^2\} \rightarrow \text{مثلاً } = r^2 r$

(2) صحیح

(113) $a_r = \sqrt{a_r} \rightarrow a_r^r = a_r \rightarrow a_r \times a_r = a_r \rightarrow (a, r)^r = a, r^r \rightarrow a, r = 1$
 $a_0 = r^v \rightarrow a, r^r = r^v \rightarrow a, r \times r^r = r^v \rightarrow r = r^v \rightarrow a, r = \frac{1}{r}$
 $|\frac{1}{r} - \frac{1}{r}| = \frac{1}{r}$

(2) صحیح

(114) $\begin{cases} \sqrt{x+a} - \sqrt{x-f} = r \\ \sqrt{x+a} + \sqrt{x-f} = A \end{cases}$

E: $A - r = \frac{a}{r} + r - r = \frac{a}{r}$

$(x+a) - (x-f) = rA$
 $rA = a + f \rightarrow A = \frac{a+f}{r}$

(2) صحیح

(115) $rx^r + \frac{r}{r}x + c < \frac{x}{|x|} ; x \in (0, \frac{1}{r})$

$rx^r + \frac{r}{r}x + c < 1$
 $rx^r + \frac{r}{r}x + c - 1 < 0$

$\begin{cases} x=0 \\ x=\frac{1}{r} \end{cases} \rightarrow \frac{1}{r} = \frac{1}{r} \rightarrow \frac{1}{r} + \frac{r}{r} + c - 1 = 0 \rightarrow c = \frac{1}{r}$

(116) $f(0) = r \rightarrow r = 1 - \log_c^{-b}$
 $f(-\frac{r}{r}) = 0 \rightarrow 0 = 1 - \log_c^{-\frac{r}{r}a-b}$
 $\rightarrow \log_c^{-b} = -1 \rightarrow -b = \frac{1}{c} \rightarrow bc = -1$
 $b+c = -\frac{r}{r} \rightarrow b - \frac{1}{b} = -\frac{r}{r} \rightarrow \begin{cases} b = -r \\ c = \frac{1}{r} \end{cases}$
 $\log_c^{-\frac{r}{r}a+r} = 1 \rightarrow -\frac{r}{r}a + r = \frac{1}{r} \rightarrow \begin{cases} a = 1 \end{cases}$

(117) $A|^{-\frac{1}{n}} \in \mathbb{F} \rightarrow A'|^{-\frac{r}{n}} \in \mathbb{F} \rightarrow -\frac{1}{n} = \frac{-\frac{r}{n}}{a + \frac{r}{n}a} = \frac{-\frac{r}{n}}{\frac{1}{n}a} = -\frac{r}{1a} = -\frac{1}{a}$

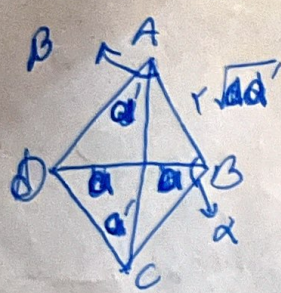
(2) صحیح

(118) $\frac{1}{\cos \alpha} - \tan \alpha = \frac{1 + \sin \alpha}{|\cos \alpha|} \rightarrow \frac{1}{|\cos \alpha|} - \frac{\sin \alpha}{\cos \alpha} = \frac{1 + \sin \alpha}{|\cos \alpha|} \rightarrow \sin \alpha < 0$

$\frac{|\sin \alpha|}{\cos \alpha} = -\frac{1}{\cos \alpha} \rightarrow \sin \alpha < 0 \rightarrow \text{مثلاً } \rightarrow \text{مثلاً } \rightarrow \text{مثلاً}$

(2) صحیح

(119)



(I) $a^r + a'^r = r \cos \alpha$

$(\frac{a}{a'})^r - (\frac{a}{a'}) + 1 =$

(C) $\sim j^e$

$a > a' \rightarrow \frac{a}{b} = r \pm \sqrt{r} \rightarrow \tan \alpha = r + \sqrt{r}$

$\frac{A-B}{r} = \beta - \alpha = \frac{\pi}{r} - \alpha \rightarrow \tan \alpha = \frac{r \tan \beta}{1 - \tan \beta} = \frac{r + r\sqrt{r}}{1 - (r + r\sqrt{r})} = \frac{1}{\sqrt{r}}$

(120)

$\cos \alpha = r \sin \alpha - 1 ; [0, \pi]$

$1 - r \sin \alpha = r \sin \alpha - 1$

$r \sin \alpha + r \sin \alpha = r$

$\sin \alpha = \frac{-r \pm \sqrt{r}}{r} \rightarrow \sin \alpha = -r \text{ or } \sin \alpha = \frac{1}{r} \rightarrow \alpha = \frac{\pi}{2}, \frac{3\pi}{2} \rightarrow \text{skil } (\frac{r\pi}{r})$

Handwritten notes in red ink:
 $\omega, i, \dots$
 $\circ, 1, 1, 2, 5, 6, 1, 1, 2$

(C) $\sim j^e$

(121)

$f(x) = \frac{1}{r} - \sin \frac{r}{a} x \rightarrow T = \frac{r}{|\frac{r}{a}|} = \frac{\pi}{r} \rightarrow |a| = \frac{1}{r}$

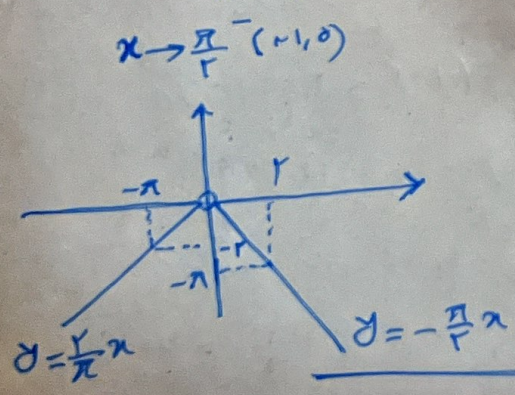
$g(x) = \cos ax \rightarrow T = \frac{2\pi}{|a|} = \frac{2\pi}{\frac{1}{r}} = 2\pi r$

(C) $\sim j^e$

(122)

$\lim_{x \rightarrow \frac{\pi}{r}} \frac{\sin x}{|f(x)|} = \frac{1}{\frac{\pi r}{r}} = \frac{r}{\pi r}$

$\lim_{n \rightarrow (-\frac{\pi}{r})^+} \frac{|f(n)|}{\sin n} = \frac{1}{-1} = -1$



$\lim_{x \rightarrow \frac{\pi}{r}} \frac{f}{\sin x} = -1$
 (C) $\sim j^e$

(123)

$\lim_{n \rightarrow \pi} \frac{f(n)}{\sin n} = -\infty \sim \frac{f(\pi)}{0^+} = -\infty \rightarrow f(\pi) < 0$

$\lim_{n \rightarrow \pi} f(n) = [\frac{r\pi}{\pi}] - r \rightarrow [r] - r = -1$

(C) $\sim j^e$

(۱۳۸)

$P = \{(1, \frac{1}{2}), (2, \frac{1}{2}), (3, \frac{1}{2}), (4, \frac{1}{2})\}$

نوب



$\rightarrow (\frac{9}{4}) \times \omega = 6\pi$

چند

(۱۳۹)

$n(S) = ۳۶$

نظریه

$P(A) = \frac{۴}{۳۶} = \frac{\omega}{9}$

چند

نظریه

۹۱۱۲۵۶۶۸۱۳

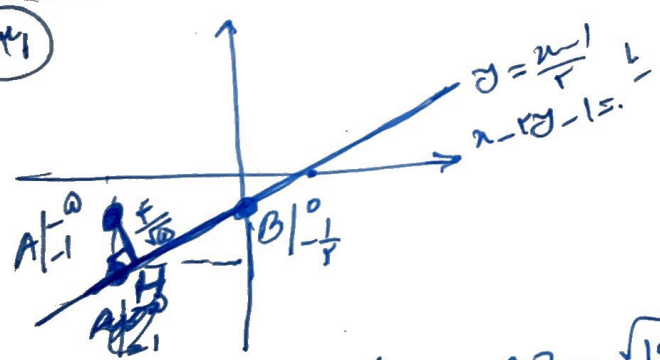
(۱۴۰)

$$P(A-B) + P(B-A) = P(A \cup B) - P(A \cap B) = P(A) + P(B) - 2(P(A) \times P(B))$$

$$= \frac{۴}{۱۰} + \frac{۴}{۱۰} - 2(\frac{۴}{۱۰} \times \frac{۴}{۱۰})$$

$$= \frac{۲}{۵}$$

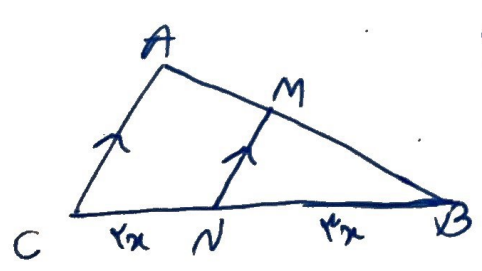
(۱۴۱)



$$S = \frac{\frac{1}{\sqrt{2}} \times \frac{1}{\sqrt{2}}}{1} = \frac{1}{2}$$

$AH = \frac{1}{\sqrt{2}}, AB = \frac{\sqrt{2}}{1} \rightarrow OH = \frac{1}{\sqrt{2}} \rightarrow OH = \frac{1}{\sqrt{2}}$

(۱۴۲)



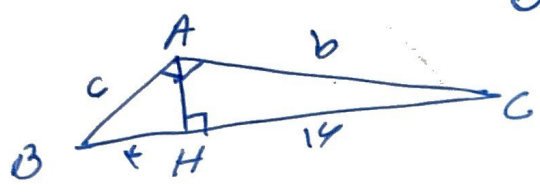
$2BN = 2CN = 2x \rightarrow BN = x, CN = x$

$$\frac{S_{ABC}}{S_{BMN}} = 4 \rightarrow \frac{1}{2} \times \omega \times AB \sin B = \frac{1}{2} \times x \times BM \sin B$$

$$\rightarrow \omega AB = 4BM \rightarrow \frac{BM}{AM} = \frac{\omega}{4}$$

چند

(۱۳۳)

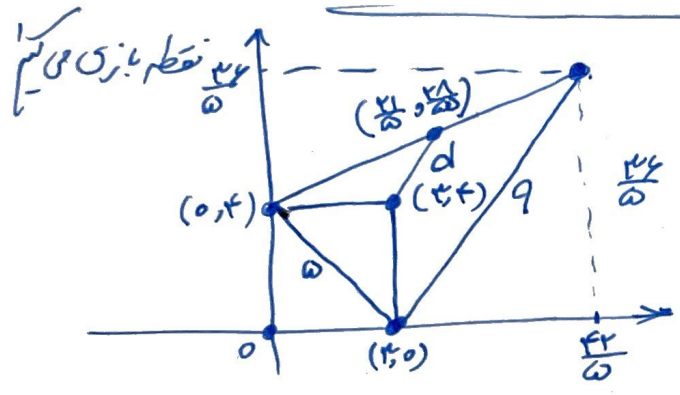


$c^2 = r \times 14 \rightarrow c = r\sqrt{14}$
 $b^2 = 14 \times 14 \rightarrow b = 14\sqrt{14}$

$\frac{b}{a} = r$

جواب نهایی
 ۹۱۱۲۵۶۶۸۱۲

(۱۳۴)



$d = \sqrt{\frac{r^2}{100} + \frac{r^2}{100}} = r$

جواب نهایی

(۱۳۵)

$|MF| + |MF'| = 2a$, $e = \frac{c}{a} = \frac{x}{1 + \sqrt{x^2 + 1}} = \frac{r}{\sqrt{14}} \rightarrow \left(\frac{\sqrt{14}}{r} x - 1 = \sqrt{x^2 + 1} \right)^2$

$F: F' : M : -1$

$c = \frac{x}{r}$, $1 + \sqrt{x^2 + 1} = 2a$

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

$\frac{a}{r} x^2 + 1 - \sqrt{14} x = x^2 + 1$

$\rightarrow a x^2 - r \sqrt{14} x = r x^2 \rightarrow x = r \sqrt{14}$

جواب نهایی

(۱۳۶)

$P = \{ (v, 1 - r n^2), (1, -1), (r, n), (v, -r n), (\frac{1}{r}, r) \}$

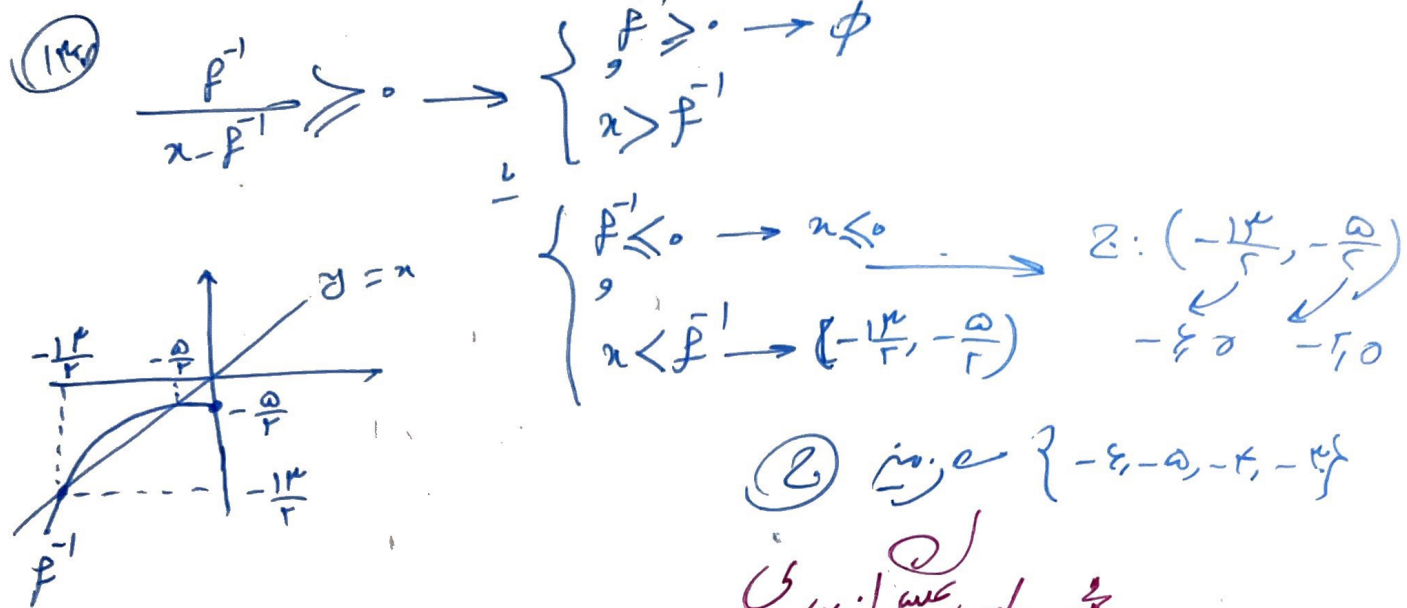
$1 - r n^2 = -r n$

$r n^2 - r n - 1 = 0$

$n = 1 \rightarrow P = \{ (v, -r), (1, -1), (r, 1), (v, -r), (1, r) \}$

$n = \frac{1}{r} \rightarrow P = \{ (v, \frac{1}{r}), (1, -1), (r, -\frac{1}{r}), (v, \frac{1}{r}), (-r, r) \}$

جواب نهایی



(2) $\{ -\epsilon, -\omega, -r, -\frac{1}{r} \}$

will be used

(149) $ra^r - \omega a + 1/a = x$
 $ra^r - \omega a + 1/a =$
 $ra^r - \omega a + 1/a =$

$\Delta = \dots \rightarrow a - \omega a^r = \dots \rightarrow a^r = \frac{1}{r}$

$a = \frac{1}{r} \rightarrow \frac{1}{r} a^r - \omega a + \frac{1}{a} = \dots \rightarrow a^r - \omega a + 1/a =$
 $(a - \frac{1}{r})^r =$
 $\omega \int \dots \rightarrow x = r$

$a = -\frac{1}{r} \checkmark$

... mathematical

(150) $P_f(x) = P_f(kx)$

$\leftarrow K = 1/r$

$ra^r - a - k = \dots \rightarrow ra^r - a - \omega = 1$

$P = \frac{c}{a} = -\frac{1}{r} = -r$

(151) $-\frac{\Delta}{ra} = -\frac{1}{r} \rightarrow \Delta = ra \rightarrow 1 - \omega a^r = ra$

$\rightarrow \omega a^r + ra - 1 =$

$\rightarrow a = \frac{-r \pm \sqrt{r^2 + 4r}}{2} = \frac{-r \pm r}{2} \rightarrow a = -\frac{1}{r} \checkmark$
 $a = \frac{1}{r}$

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