



سایت ویژه ریاضیات www.riazisara.ir

درسنامه ها و جزوه های دروس ریاضیات

دانلود نمونه سوالات امتحانات ریاضی

نمونه سوالات و پاسخنامه کنکور

دانلود نرم افزارهای ریاضیات

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کانال سایت ریاضی سرا در تلگرام:

<https://telegram.me/riazisara>

(@riazisara)

①

برنام صدا

$$(\alpha^r + \beta^r)^r - \alpha^r \beta^r = \alpha^r + \beta^r + \alpha^r \beta^r$$

$$= 3\sqrt{2} - 1 + 3\sqrt{2} + 1 + \sqrt{18-14} = 4\sqrt{2} + \sqrt{2} = \sqrt{50}$$

-1.1

$S < \cdot$, $P > \cdot$

-1.2

$$\frac{r(m+1)}{m-r} < \cdot$$

$$\frac{1r}{m-r} > \cdot$$

$$\downarrow$$

$$\textcircled{-1 < m < 2}$$

①

$$\downarrow$$

$$\textcircled{m > 2}$$

②

① و ② استرلا نازنه

$$f(-1) = g(-1) \Rightarrow r^{-a+b} = 9 \Rightarrow \textcircled{-a+b=2}$$

① -1.3

$$f(2) = \frac{1}{r} \Rightarrow r^{2a+b} = \frac{1}{r} \Rightarrow \textcircled{2a+b=-1}$$

②

① و ② $\Rightarrow a = -1, b = 1$

$$f(x) = 2x \Rightarrow r^{1-a} = 2x \Rightarrow \textcircled{a = -1}$$

$$y = a + r \sin(bx + \frac{\pi}{r})$$

1.4

$$\text{Max} = a + r = 1 \Rightarrow \textcircled{a = -1}$$

$$T = \frac{2\pi}{|b|} = \frac{2\pi}{18} \Rightarrow \textcircled{b = 3}$$

$$\textcircled{a+b=2}$$

$$p(x) = ax^2 + 4x^2 - 14x + 10 - a$$

-1.5

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

$$p(1) = 0 \rightarrow$$

ببین

$$p'(1) = 0 \rightarrow \textcircled{a = 2}$$

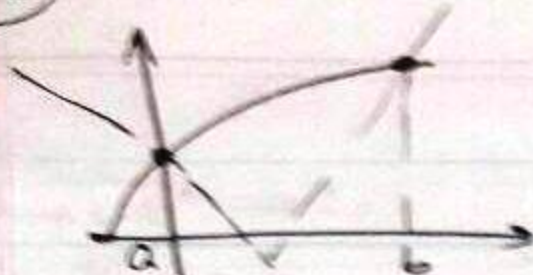
دانلود از سایت ریاضی سرا

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پایه نهم ریاضی و معادله درجه دوم

علی

④



$$\lambda > 1 \Rightarrow \sqrt{r^2 \lambda^2 + r^2} = r\lambda - r - \lambda - \frac{1 \cdot r}{\lambda}$$

$$\Downarrow$$

$$\lambda = r$$

$$E: (0, r) \Rightarrow \frac{v+r}{r} = \left(\frac{v}{r}\right)$$

$$1 - \log(r^2 - r\lambda) \geq 0 \Rightarrow \log(r^2 - r\lambda) \leq 1 \quad -1 \cdot r$$

$$\Rightarrow -r < r^2 - r\lambda \leq 1 \Rightarrow$$

$$\textcircled{1} \quad r^2 - r\lambda > -r \rightarrow \lambda < r \leq \lambda > r$$

$$\textcircled{2} \quad r^2 - r\lambda - 1 \leq 0 \rightarrow -r \leq \lambda \leq 0$$

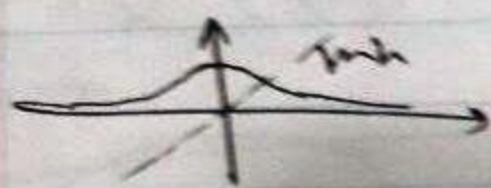
$$-r \leq \lambda < r \quad \leq \quad r < \lambda \leq 0$$

$$\sin r\lambda = (\sin^2 \lambda - \cos^2 \lambda)(\sin^2 \lambda + \sin^2 \lambda) \quad -1 \cdot r$$

$$r \sin^2 \lambda - \cos^2 \lambda = -\cos^2 \lambda$$

$$\cos^2 \lambda (1 + r \sin^2 \lambda) = 0 \rightarrow r\lambda = \frac{r}{r}, \frac{r\pi}{r}, \frac{v\pi}{r}, \frac{11R}{r} \Rightarrow \left(\frac{0\pi}{r}\right)$$

$$y = \cos^2 \lambda^{-1} \lambda = \frac{1}{\sqrt{1+r^2}} = m\lambda \quad -1 \cdot r$$



$$m \in \mathbb{R} - \{0\}$$

$$\lambda \rightarrow \frac{1}{r} \Rightarrow L = 0 + r = r$$

$$\lambda \rightarrow \frac{1}{r} \Rightarrow L = (-1)(-1) + r = r$$

(5)

$$f(x) = [x^2]$$

$$[-1, 2]$$

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$x = -1 \rightarrow (-1)^2 \Rightarrow L = 0$
 $f(-1) = 1$ ✓

$x = 0 \rightarrow 0^2 \Rightarrow L = 0$ X
 $x \rightarrow 0^+ \Rightarrow L > 0$

$x = 1 \rightarrow 1^2 \Rightarrow L = 0$ ✓
 $x \rightarrow 1^+ \Rightarrow L = 1$

5 منظر

$x = \sqrt{2} \rightarrow (\sqrt{2})^2 \Rightarrow L = 2$ ✓
 $x \rightarrow \sqrt{2}^+ \Rightarrow L = 1$

$x = \sqrt{2}$ ✓

$x = 2$ ✓

$$y' = \frac{x}{\sqrt{1+x^2}} \Rightarrow -1 < y' < 1$$

- 112

$$\Rightarrow -1 < \frac{m}{m+2} < 1 \Rightarrow \frac{m^2}{m^2+4m+4} < 1$$

$$\Rightarrow m^2 + 4m + 4 > m^2 \Rightarrow m > -1$$

$\lim_{n \rightarrow \infty} \left(\frac{1}{n}\right) = 0$ مقدار

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$\Rightarrow a_n: 0, \frac{1}{2}, \frac{1}{8}, \dots$

غیر یکنوا

$$f\left(\frac{1}{x^2} - \left[\frac{1}{x^2}\right]\right) \rightarrow$$

- 114

\rightarrow

$\lim f = \frac{1}{2}$

115 - دنباله نزولی است پس:

صفر

$$y = \sqrt[r]{x} \left(x + \frac{r}{r+1} \right) = r x + \left(\frac{1}{r} \right)$$

- 114

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

- 115

$$f(x) \times f(x-h) = 1 \implies f(x-h) = \frac{1}{f(x)} = 1$$

$$\implies \begin{cases} x-h = f^{-1}(1) \\ x = f^{-1}\left(\frac{1}{a}\right) \end{cases} \implies f^{-1}(1) + f^{-1}\left(\frac{1}{a}\right) = 0$$

$$f'(x) = e^{1-x} - (x+r)e^{1-x}$$

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$$f'(1) = -r = m_1$$

$$A \parallel r \rightarrow m_A = m_r = r$$

$$\tan \alpha = \left| \frac{0}{(-r)+1} \right| = 1$$

$$x=r \implies f(r) = f, f'(r) = r$$

- 119

با استفاده از هویت داریم:

$$\frac{r f f' - f f'}{1} = 12$$

$$y = \delta x^{\frac{r}{r}} - x^{\frac{\delta}{r}}$$

- 120

$$y' = \frac{1}{r} x^{-\frac{1}{r}} - \frac{\delta}{r} x^{\frac{r}{r}}$$

$$y'' = -\frac{1}{r^2} x^{-\frac{1}{r}} - \frac{1}{r} x^{-\frac{1}{r}} = 0 \implies r = -1$$

$$\frac{1}{r} h r v^r = \frac{r}{r} \Rightarrow h v^r = 1 \quad -121$$

$$S = r v \sqrt{h^r + v^r} = r v \frac{1}{\sqrt{h}} \sqrt{h^r + \frac{1}{h}} = r \sqrt{h + \frac{1}{h^r}}$$

$$S' = 0 \Rightarrow h = \sqrt{r}$$

$$b r = -r \Rightarrow C = r \quad -122$$

$$y = h + a - r$$

بازگشت به حالت اول

$$a = v + a - r \Rightarrow a = -f$$

بازگشت به حالت اول

$$h^r - f h + b = 0 \Rightarrow b = f$$

$$\bar{y} = \frac{1}{r} \int_r^f \left(1 - \frac{r}{h^r}\right) dh = \frac{1}{r} \left(h + \frac{r}{h}\right) \Big|_r^f \quad -123$$

$$= \frac{1}{r} \left(f + \frac{1}{f} - r - 1\right) = \frac{r}{f}$$

$$\int_{\frac{r}{f}}^{\frac{r}{f}} \frac{1 + \cos^r h}{r \sin^r h} dh = \int_{\frac{r}{f}}^{\frac{r}{f}} \frac{r \cos^r h}{r \sin^r h} dh \quad -124$$

$$= \int_{\frac{r}{f}}^{\frac{r}{f}} \cot^r h dh = (-\cot h - h) \Big|_{\frac{r}{f}}^{\frac{r}{f}} = 1 - \frac{r}{f}$$