



سایت ویژه ریاضیات www.riazisara.ir

درسنامه ها و جزوه های ریاضی

سوالات و پاسخنامه تشریحی کنکور

نمونه سوالات امتحانات ریاضی

نرم افزارهای ریاضیات

و...

کانال سایت ریاضی سرا در تلگرام:

<https://t.me/riazisara>



(@riazisara)

دسته اول از دو
 $u_1 = 1$
 $u_2 = \frac{1}{r}$
 $1 - \frac{1}{r} = \frac{r}{r}$

$\Sigma = 40 - 20 \cdot e^{-\frac{t}{2}}$
 $\Rightarrow e^{-\frac{t}{2}} = \frac{r}{20} \Rightarrow -\frac{t}{2} = \ln \frac{r}{20}$
 $t = 2 \ln \left(\frac{20}{r}\right) \Rightarrow t = 2 \ln 20 - 2 \ln r$
 $\frac{40}{100} \times 40 = 16,8 \rightarrow$...

$\tan \psi_m = \cot \alpha = \tan \left(\frac{\pi}{2} - \alpha\right)$
 $\psi_m = k\pi + \frac{\pi}{2} - \alpha$
 $\psi_m = k\pi + \frac{\pi}{2}$
 $\alpha = \frac{k\pi}{2} + \frac{\pi}{2}$

$\Rightarrow \begin{cases} a - 2b + z = -1 + r \\ a - 2b = -1 \\ 2a + b = 2m - 1 \\ -a + b = 11 \end{cases} \Rightarrow \begin{cases} a = -r \\ b = -1 \end{cases}$
 $f(1) = a + b + z = 0$

$\frac{1}{r} (v_1 r^2 - r y) + (12a - r y') + r y y' = 0$
 $n=1 \Rightarrow y' = -\frac{v}{2} \rightarrow m = \frac{2}{v}$

$f' = \frac{\Sigma}{r} a^{\frac{1}{r}} - \frac{\Sigma}{r} a^{-\frac{r}{r}} < 0$
 $f'' = \frac{\Sigma}{a} a^{-\frac{r}{r}} + \frac{\Lambda}{a} a^{-\frac{0}{r}} < 0$

$\frac{-r}{m-4} > 0 \Rightarrow m < 4$
 $\frac{r_m}{m-4} < 0 \Rightarrow 0 < m < 4$
 $\Delta > 0 \quad m^2 + 4m - 16 > 0 \Rightarrow \begin{cases} m < -4 \\ m > 4 \end{cases}$
 $r < m < 4$

$\frac{\sqrt{r}(\sin m - \cos m)}{r} = r$
 $\frac{\sqrt{r}(\sin m + \cos m)}{r}$
 $\sin m - \cos m = r \sin m + r \cos m$
 $-\sin m = r \cos m \Rightarrow \frac{\sin m}{\cos m} = -r$

$2m - r = t \Rightarrow a = \frac{t+r}{r}$
 $f(t) = r \left(\frac{t+r}{r}\right)^r - 12 \left(\frac{t+r}{r}\right) + 13$
 $= t^r + 4t + 9 - 12t - 12 + 13$
 $= t^r - t + 9$

Hop $\lim_{a \rightarrow r} \frac{4a-10}{\frac{1}{\sqrt{4a}}} = -11r$

$f' = r \cos a \sin^r a - r \sin m \cos a$
 $= r \sin m \cos a (\sin^r a - \cos^r a)$
 $= r \sin^2 a (-\cos^2 a)$
 $= -\sin^2 a \left| \frac{\pi}{2} \right. \Rightarrow -\sin^2 \frac{\pi}{2} = -1$

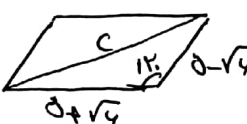
$2a+1 = a \log \frac{r}{y} \Rightarrow a = -1$
 $f(r) = -1 \times r + r^{-1} = -\frac{r}{r}$

$\begin{pmatrix} 0 \\ 2 \end{pmatrix} \begin{pmatrix} r \\ 2 \end{pmatrix} \times \frac{1}{2} + \begin{pmatrix} 0 \\ 0 \end{pmatrix} \begin{pmatrix} r \\ 2 \end{pmatrix} = \frac{11}{12}$

$\begin{cases} 2a^2 - a - 10 \leq 2a - 2 & a > r \\ 2a^2 - a - 10 \leq 1 & r < m < r \\ 2a^2 - a - 10 \leq -2a + 2 & a < r \end{cases}$
 یک سید کسری از 2 دارد
 داند از سایت ریاضی سرا
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$ry - 2a = r \Rightarrow 2a - ry = r$
 $\Rightarrow ry = 2a - r \Rightarrow y = \frac{2a-r}{r}$

$-a^r - \frac{1}{r} a + \frac{9}{r} = 2a$
 $-a^r - \frac{1}{r} a + \frac{9}{r} = a$
 $\Rightarrow 2a^r + 10a - 9 = 0$
 $2a^r + 10a - 9 = 0$

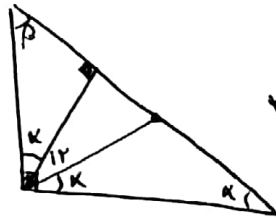
$\frac{1+(r-2)}{r} = -1$

 $c^2 = (a+b)^2 + (a-b)^2 - 2(a+b)(a-b)\cos \alpha$
 $c^2 = 2a^2 + 2b^2 + 2ab - 2ab\cos \alpha$
 $c^2 = 11 \Rightarrow c = 3$

$\begin{bmatrix} -1 & r \\ r & r \end{bmatrix} \begin{bmatrix} -1 & r \\ r & r \end{bmatrix} = \begin{bmatrix} v & r \\ 9 & r_0 \end{bmatrix}$

$(-11) \times r + (-4) \times 2 + (-1) \times 11 + r \times a + 4 \times r \times z = 0$
 $a = 4$
 $\frac{19 \times 10 + 2 \times 2 \times 10}{r} = 22 \times \frac{4}{2} = \frac{44}{100}$

$Cov = \frac{\sigma}{a} = \frac{4}{10}$
 $\sigma^2 = \frac{\Sigma a_i^2}{n} - \bar{a}^2$
 $\sigma^2 = 20 \times \frac{4}{100} = \frac{4}{5} \Rightarrow \sigma = \frac{2}{\sqrt{5}}$
 $\frac{a}{2} = \frac{\Sigma a_i^2}{n} - 4 \times 20 \Rightarrow \frac{\Sigma a_i^2}{n} = 44$

- $(1, 4)$
 $(2, 2), (2, 4)$
 $(3, 1), (3, 5)$
 $(4, 2)$
 $(5, 3)$
 $(4, 2), (4, 4)$

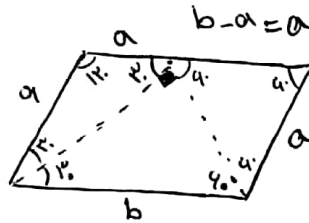


$$\begin{aligned} 2x + 2y &= 40 \\ 2x &= 4\sqrt{1} \\ x &= 2\sqrt{1} \end{aligned}$$

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$$\begin{aligned} f(x) &= x^2 - 4x^2 + 4x + 2 - m \\ f'(x) &= 2x - 8x + 4 = 0 \\ 2(x-4)(x-1) &= 0 \\ x=1 & \quad f(1) < 0 \\ x=4 & \quad f(4) > 0 \end{aligned}$$

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$$\begin{aligned} a+b &= 4\sqrt{r} \\ b-a &= a \Rightarrow b=2a \\ \left. \begin{aligned} a &= 2\sqrt{r} \\ b &= 4\sqrt{r} \end{aligned} \right\} \\ C_{\text{area}} &= ab \sin \theta = 2\sqrt{r} \times 4\sqrt{r} \times \frac{\sqrt{r}}{r} \\ &= 12\sqrt{r} \end{aligned}$$

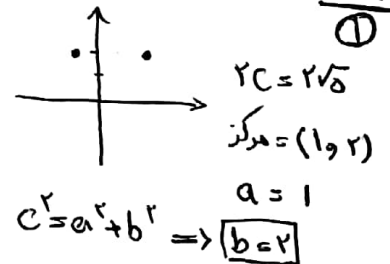
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$$\begin{aligned} f(1) < 0 & \Rightarrow 1 - 4 + 4 + 2 - m < 0 \\ 4 - m < 0 & \Rightarrow m < 4 \\ f(4) > 0 & \Rightarrow 2 \cdot 4 - 8 \cdot 4 + 2 \cdot 4 + 2 - m > 0 \\ m < 2 \end{aligned}$$

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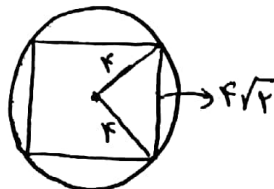
$$\begin{aligned} \sqrt{(x-3)^2 + (y-4)^2} &= 2\sqrt{x^2 + y^2} \\ (x+1)^2 + (y+2)^2 &= r_0 \\ R = \sqrt{r_0} \quad d = 4\sqrt{5} \end{aligned}$$

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$$\begin{aligned} r &= 2\sqrt{5} \\ \text{مرکز} &= (1, 2) \\ a &= 1 \\ C^2 &= a^2 + b^2 \Rightarrow b = 2 \\ \frac{(x-1)^2}{1} - \frac{(y-2)^2}{4} &= 1 \\ \frac{x-1}{1} &= \frac{y-2}{2} \\ y &= 2x - 2 + 2 \Rightarrow y = 2x \end{aligned}$$

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$$\text{حجم منبر} = (F\sqrt{2})^2 \times \frac{1}{3}$$

$$(5-1) \times 3 = 12 \quad \frac{150}{2}$$

$$\begin{aligned} \int_1^F 2ax - a \frac{1}{x} dx & \\ a^2 - \frac{a^2}{-1} \Big|_1^F & \Rightarrow a^2 + 2a \sqrt{a^2} \\ (14 + \frac{1}{2}) - (1 + 2) &= 14 - 2 = 12 \end{aligned}$$

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دولتی
روستا
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