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"به نام خدا"

(ستایش خدایاری)

(یازدهم دختر A)

۱

$-\frac{۳}{۲}۹ - b = c$ $\quad -\frac{۳}{۲} = -\frac{۳}{۲}۹ \longrightarrow a=۱$

$x=۰ \longrightarrow -۱ = \pm \log_c^{-b} \longrightarrow c^{-۱} = -b \longrightarrow -\frac{۱}{c} = +b$

$c - \frac{۱}{c} = -\frac{۳}{۲}$ $\quad c =$

$\frac{c^۲-۱}{c} = -\frac{۳}{۲}$ $\quad ۲c^۲ - ۲ + ۳c = ۰$ ✓

$c^۲ + ۳c - ۴ = ۰$

$(c+۴)(c-۱)$ $\quad -۴, ۱$ $\quad \cancel{c=۱}, c=\frac{۱}{۲}$ $\quad b=-۲$

$\frac{۳}{۲}\alpha - ۲ = -۳$

۲

$+۱ = c \alpha ۳^۹ + b\alpha$ $\quad = c\alpha ۳^۹ \alpha ۳^b$ $\quad b=۱$

$-\frac{۱}{۳}\frac{۲}{۳} = ۱ + c \times ۳^۹$ $\quad +\frac{۱}{۳}$ $\quad ۳ = ۳^b$

$-\frac{۱}{۳} = c \times ۳^۹$ ✓

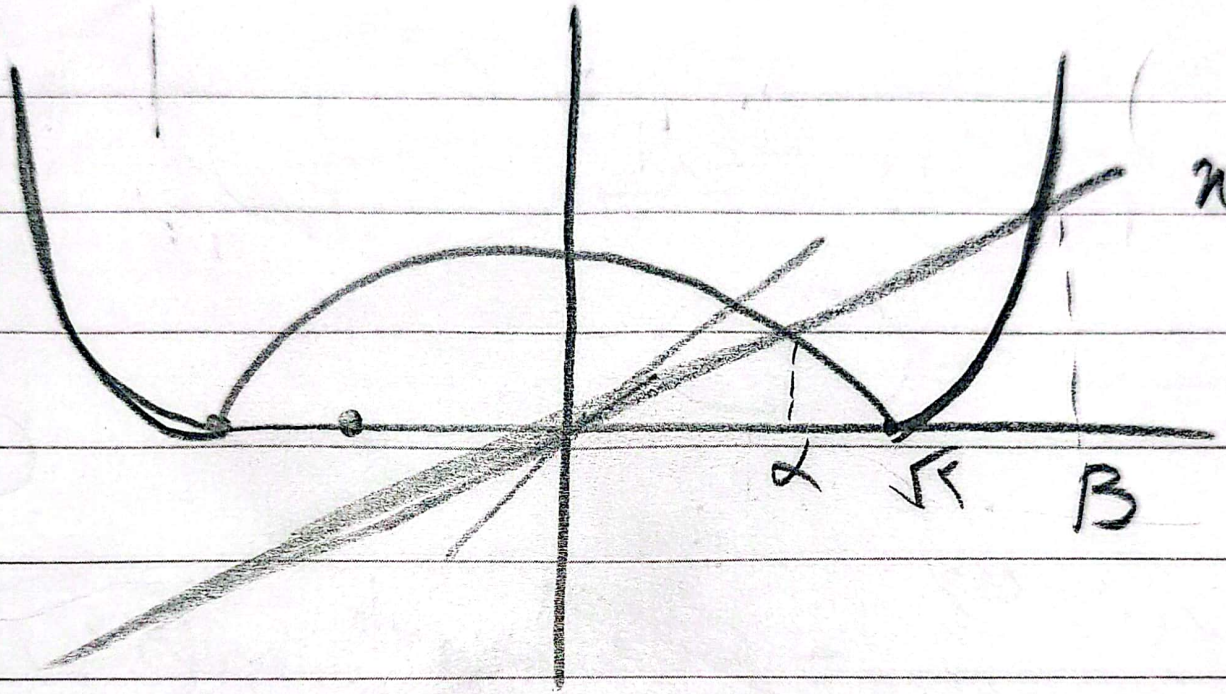
$۱ + c \alpha ۳^۹ \alpha ۳^{-b}$

$۱ + -\frac{۱}{۳} \times \frac{۱}{۳} = ۱ - \frac{۱}{۹} = \frac{۸}{۹}$

Senobar

(۴)

$|x^2-2|-x>0$ $|x^2-2|>x$



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۳۷

(۰, ۲۰)

$۲ = c + ۶ \log_{۵} b$

$۲ - \log_{۵} b = c$

$(۲,۴, ۰) \rightarrow ۰ = \log_{۵}^{۲,۴a+b} + c$

$\log_{۵}^{۲,۴a+b} \quad \log_{۵}^{۲۵} + ۶ - \log_{۵} b$

$۰ = \log_{۵} \frac{۲,۴a+b}{b} \times ۲۵$

$\frac{۱}{۲۵} = \frac{۲,۴a+b}{b}$

$\frac{۱}{۲۵} = ۲,۴t + ۱$

$\frac{-۲۴}{۲۵} = \frac{۲۴}{۱۰} t$

$-\frac{۲}{۵} = \frac{a}{b}$

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$-1-3+8=4$ $(1,4)$

$2^{4} = 2^{b-a}$ $\quad 1=b-a$

$2^{5} = 2^{b+a}$ $\quad 3=b+a$

$a=1$ $\quad b=2$

$4=2b$

3 ✓

(د)

(1,0) (2,2) $\quad 2=\left(\frac{1}{2}\right)^{A+b}$ $\quad A+b=-1$

(ج)

$4=\left(\frac{1}{2}\right)^{2A+B}$ $\quad 2=-2A-B$

$2=-2A-(-A-1) \Rightarrow -A+8=21$

$A=-1$

$b=0$

$-2+8\left(\frac{1}{2}\right)^{3k-1+0}$

$-2+8=6$

✓

$\log_5^2 = \frac{10}{24}$ $\log_5^3 = \frac{10}{14}$

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(V)

$\frac{1}{4} A_1 = A_1 \left(\frac{8}{9}\right)^{\frac{t}{40}}$

$\log_5^{\frac{1}{4}} = \frac{t}{40} \log_5^{\frac{8}{9}}$

$-\log_5^4 = \frac{t}{40} (\log_5^8 - \log_5^9)$

$-(\log_5^4 - \log_5^3) = \frac{t}{40} \left(4 \times \frac{10}{24} - 3 \times \frac{10}{14}\right)$

$\frac{10}{24}$ $\frac{10}{14}$ $\frac{5}{4}$ $\frac{5}{7}$

$-\left(\frac{10}{12} + \frac{10}{7}\right) = \frac{t}{30} \left(\frac{5}{4} - \frac{10}{7}\right)$

$+2\left(\frac{70+125}{28}\right) = \frac{t}{30} \times \frac{35-40}{28} \frac{5+}{28}$

$\frac{190}{28} = \frac{t}{30} \times \frac{5}{28}$

$\frac{190 \times 30}{28 \times 5} = t$

$t = 380$

Sanabar

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$100 - 12,5 = 87,5$

$\frac{99}{100,0}$
$12,5$
$87,5$

$\frac{1}{2}A_1 = A_1 (87,5)^{\frac{t}{7}}$ (1)

$2^{\varepsilon} = 2^{\varepsilon}$

$-\log 2 = \frac{t}{7} \log 87,5 = \frac{t}{7} (\log 112,5 - \log 2)$

$2^{2,4} = 5$ $\quad$ $3^{1,4} = 5$

$2^{2,4} = 3^{1,4}$

$2^{\frac{2,4}{1,4}} = 2^{\frac{12}{7}} = 3$

$2 = 3^{\frac{7}{12}}$

$-\log 2 = \frac{t}{7} \log \frac{7 \times 5^2}{10}$

$-\log 2 = \frac{t}{7} (\log 7 + 2\log 5 - \log 10)$ $\quad$ $3^{\frac{7}{12}} \log 3$

$-12(\log 2 - \log 3) = \frac{t}{7}$

$\frac{12 \log 2}{\log 3}$

$12 \log \frac{2}{3}$

(9)

$\frac{1}{3}A_1 = A_1 (\frac{96}{100})^{\frac{t}{1}}$

$-\log 3 = t \log \frac{96}{100}$

$3^{\varepsilon} \times 3^{\varepsilon} \times 2 = 3^{\varepsilon} \times 16 \times 2 = 2^{5} \times 3^{\varepsilon}$

$-\%8 = t \times (\log 96 - 2)$ $\quad$ $+\%0,2$

$+\%8 = t(5\log 2 + \log 3 - 2)$

$t = 24$

$\%8$
$1,5$
$\%8$
$1,985$

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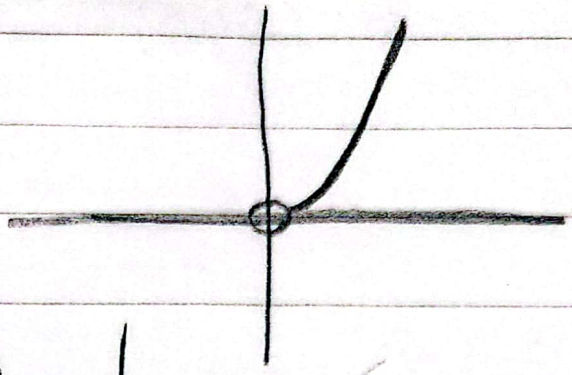
۱۵

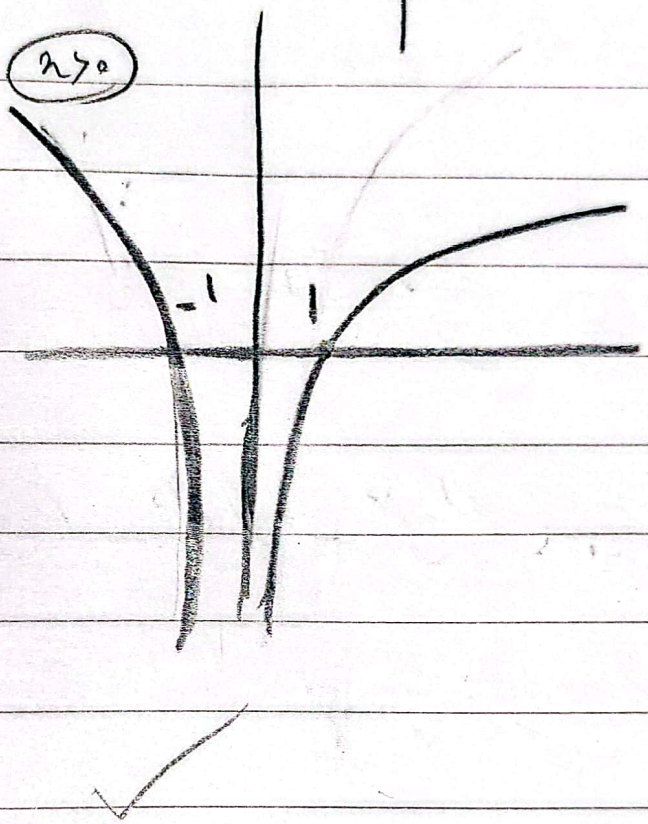
$x > 0$

الف) $y = x^2$



ب) $y = \log_2 x$

$x > 0$



راست ی ست

محور

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