

دستبردار

Date

$f(a) = \dots A \text{ of } B \xrightarrow{a \cdot \mu} \mu^2 \cdot \mu \quad \mu A = B$
 $g = a^2 \xrightarrow{a=1} 1^2 = \mu^2 = B \quad \mu A + B = \mu$
 $f(x) = \mu^{x-1} \xrightarrow{x=0} f(x) = \frac{1}{\mu} \quad A + B = 0 \rightarrow A = 1$
 $B = -1$

$\log_{\mu} (\mu^x + 10)$ (سوال 2)
 $\rightarrow \mu^x + 10 = \mu^t \rightarrow \mu^x - \mu^t + 10 = 0 \rightarrow (\mu^x - 0)(\mu^t - 10)$
 $\mu^x = 0 \quad \log_{\mu} 0 = x \rightarrow \log_{\mu} \mu^x = 0$
 $\mu^x = \mu \quad \log_{\mu} \mu = x \rightarrow \log_{\mu} 10 = x$

$(\log_{\mu} \mu)^{\mu} + \log_{\mu} \mu \times \log_{\mu} \mu \rightarrow \mu^{\mu} \times \mu$ (سوال 3)
 (147) (1322)

$(\log_{\mu} \mu)^{\mu} + (\mu - \log_{\mu} \mu) \times (\mu + \log_{\mu} \mu) = -(\log_{\mu} \mu)^{\mu} + \mu$
 (سوال 4)

$\log_{\mu} (\mu^x - 10 + 1) + \mu \log_{\mu} (1-a) = 0$ (سوال 5)
 $-(\mu-1)^{\mu} (\mu-1)^{\mu} = 1.0 \quad -(\mu-1)^{\mu} = 1.0$
 $a-1 = -1 \quad \mu = -9$
 $\log_{\mu} (-\mu) = \log_{\mu} \mu^{\mu} = \mu$



$\log_2 (2^x - 49x + 5) + \log_2 (x-2) = 3$ (سوال 5)
 $\log_2 \sqrt{2} = \frac{1}{2}$

$2^3 - 1 = 3 \log_2 2 \rightarrow 2^3 \rightarrow 2^x - 1 = 1 \rightarrow 2^x = 2$

$\log_2 \sqrt{14} \rightarrow \frac{1}{2} \log_2 14$
 $\frac{1}{2} \log_2 14 = \frac{1}{2} \log_2 (2 \cdot 7) = \frac{1}{2} (1 + \log_2 7)$
 $\frac{1}{2} = \frac{1}{2} \Rightarrow \boxed{1}$

$\log_2 (x-1) - \log_2 \frac{1}{(x-2)^2} = 3$ (سوال 4)

$\log_2 (x-1) - \log_2 (x-2)^{-2} = 3 \rightarrow \log_2 (x-1) - (-2 \log_2 (x-2)) = 3$

$\log_2 1 \Rightarrow \frac{3}{2} = \frac{3}{2} \Rightarrow \boxed{4}$

$x-1=1 \rightarrow \log_2 (x-1) = \frac{3}{2}$
 $\boxed{x=2}$

$11^x = 2 \cdot 11^{x-2} \rightarrow 11^x = 11^{x-2} \cdot 2 \rightarrow 11^x - 11^{x-2} = 0$ (سوال 7)

$\log_2 \frac{11^x - 11^{x-2}}{2} = \frac{1}{2}$
 $\frac{11^x - 11^{x-2}}{2} = \sqrt{2}$

$\log_2 \frac{1}{1} = 0$
 $\log_2 \frac{1}{2} = -1$

$\log_2 \frac{1}{1} = 0$
 $\log_2 \frac{1}{2} = -1$
 $\frac{1}{2} = \frac{10}{21} = \frac{5}{\sqrt{21}}$

Subject:

Date:

$$\log^x \in 2 \cdot 1/1 \quad \log^y \rightarrow x^x \Rightarrow x^y \cdot y^{1/y} \quad (\text{سوال 9})$$

$$x^{1/y} = x^x \quad \log^x \frac{x^y}{x^{1/y}} = \frac{x^y}{x^{1/y}} = \frac{x^y}{x^y} = \frac{1^y}{1/x}$$

$$a(\log x)^n + ax + b \log x = \dots \quad (1. \text{ جواب})$$

$$n = -1 \rightarrow (\log^x) (a+b) = a \rightarrow \log^x = \frac{a}{a+b} = (\sqrt{x})^{\frac{b}{a}}$$

$$\log^x = \frac{a}{a+b} = 1 + \frac{b}{a} \leftarrow \frac{b}{a}$$

$$\log^x = \frac{a}{a+b} \rightarrow \sqrt{x} \log^x = \sqrt{x} \left(1 + \frac{b}{a} \right) = \sqrt{x}$$