

1.-Calcula os seguintes logaritmos sen utilizar a calculadora

$\log_2 32$

$\log_3 729$

$\log_9 9$

$\log 1000$

$\log_3 81$

$\log_2 128$

$\log 10$

$\log_2 \frac{1}{8}$

$\log_3 \frac{1}{3}$

$\log_5 \frac{1}{5}$

$\log_3 \frac{1}{9}$

$\log_3 \frac{1}{81}$

2.-Calcula o valor de x nas seguintes expresións

$\log_x 32 = 5$

$\log_x 49 = 2$

$\log_x 5 = \frac{-1}{2}$

$\log_x 4 = \frac{-1}{2}$

$\log_2 16 = x$

$\log_a x = 0$

$\log_9 \sqrt[3]{3} = x$

$\log_x 36 = 21$

$\log_x 5 = \frac{1}{2}$

$\log_x 32 = \frac{5}{2}$

$\log_x 216 = 3$

$\log 10000 = x$

$\log_9 x = 2$

$\log_x 81 = 2$

$\log_x \frac{1}{26} = -4$

$\log_x 0'001 = -2$

$\log_x 64 = 3$

$\log_3 27 = x$

$\log_{16} 4 = x$

$\log 1 = x$

$\log_x 0'0001 = -4$

$\log_3 3^2 \sqrt{3} = x$

$\log_2 (\log_2 2^8) = x$

$\log_x \frac{1}{16} = -4$

3.-Calcula x nas seguintes ecuacións:

$\log x = \log 5 - \log 2$

$1 + 2 \log x = 3$

$3 \log_3 x = -9$

4.-Resolve:

$\log_2 16 = x$

$\log 10000 = x$

$\log_3 27 = x$

$\log_a x = 0$

$\log_9 x = 2$

$\log_3 27 = x$

$\log_9 \sqrt[3]{3} = x$

5.-Resolve:

$\log x + \log 30 = 1$

$\log 2x = \log 32 - \log x$

$\log x = \log 2$

$\log x = 2 \log 3$

$\log x - \log 10 = 2$

$\log 7 = \log x + \log 3$

$\log (x+1) - \log x = 1$

$\log (3x+5) - \log (2x+1) = 1 - \log 5$

$\log (4x-1) - \log (3x-2) = \log 2$

$2 \log x - \log (x+6) = 0$

$\log_2 (x^2 + x + 2) = 2$

$\log (3x+25) = 2$

$\frac{5-3x}{x-2} = \log 0'1$

$\log_3 (3x-19) - \log_3 (x+1) = 2$

$$\begin{cases} \log x + \log y = 3 \\ x - 3y = 70 \end{cases}$$

$$\begin{cases} \log x + \log y = 3 \\ \log x - \log y = 1 \end{cases}$$

6.-Expresa en función de log 2

$\log 64 =$

$\log \frac{1}{16}$

$\log 5 =$

$\log 0'32 =$

$\log \frac{\sqrt[3]{32}}{5}$

7.-Calcula

$\log_2 \frac{\sqrt[3]{64} \cdot 2^3}{2^4 \cdot \sqrt{128}}$

$\log \frac{0'01 \cdot \sqrt[3]{100}}{10^{-1} \cdot 0'1}$