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tema 2

Evaluación de matemáticas

at y dem. *[scribble]* ignoris moris!

6/11/25

1) aplicar cambio de base y luego calcular.

2) Ecuaciones.

1) a) $\log_{\frac{1}{2}} 5 =$

b) $\log_2 \frac{9}{4} =$

2) a) $\log_3 x - \log_3 2 = 2$

b) $\log_2 (3x) = 3$

c) $\frac{1}{3} = 2^x$

d) $\log_3 2 = \frac{\log x}{3}$

2) a) $\log_3 \frac{x}{2} = 2$

$3^2 = \frac{x}{2}$

$9 = \frac{x}{2}$

$2 \cdot 9 = x$

$18 = x$

b) $\log_2 (3x) = 3$

$2^3 = (3x)$

$8 = 3x$

$\frac{8}{3} = x$

$$c) \frac{1}{3} = 2^x$$
$$3^{-1} = 2^x$$

$$d) \log_3 2 = \frac{\log x}{3}$$

$$3 \cdot \log_3 2 = \log_3 x$$

$$3 \cdot \log_3 2 - \log_3 x = 0$$

$$3 \cdot \log_3 \frac{2}{x} = 0$$

$$3^0 = \frac{2}{x}$$

$$1 = \frac{2}{x}$$

$$x = \frac{2}{1}$$

$$\boxed{x = 2}$$

$$1) \log_{\frac{1}{2}} 5 =$$

$$2) \log_{\frac{1}{2}} 5 = \frac{\log 5}{\log \frac{1}{2}} = \frac{0,698}{-0,301} = -2,318$$

$$b) \log_2 \frac{7}{4} =$$

$$\log_2 \frac{7}{4} = \frac{\log \frac{7}{4}}{\log 2} = \frac{0,352}{0,301} = 1,169$$