WolframAlpha computational knowledge engine.

10*log10(10^(x/10)+10^((x-d)/10))=t solve for real x

Web Apps | Examples | Random

Input interpretation:

solve	$10 \log_{10}\left(10^{x/10} + 10^{\frac{x-d}{10}}\right) = t$	for	x	over the reals

$\log_b(x)$ is the base-b logarithm

Result:

Approximate form | Step-by-step solution

$$x = \frac{\log\left(\frac{10^{d+t}}{\left(10^{d/10}+1\right)^{10}}\right)}{\log(10)} \quad \text{and} \quad 10^{-d/10} > -1$$

Open code

$\log(x)$ is the natural logarithm