

Logarithmic Equations

All bases are positive. Cut out the squares. Arrange them so that touching edges are equivalent equations.

$\log_6 x = 17$ $10^{\log x} \sqrt{7} = \frac{1}{2}$ $\log_3 x = 5$	$x = 11$ $10^{\log_7} x = 6$ $x = 12$	$x = 6$ $10^{\log_5} x = 7$ $x = 7$	$x = 8$ $10^{\log_2} x = x$ $x = \frac{1}{2}$	$10^{\log_7} x = 5$ $x = 7$
$x = 81$ $10^{\log_{10}} .001 = x$ $\log_{\sqrt{2}} x = 6$	$x = 243$ $10^{\log_9} 27 = x$ $x = -6$	$x = 13$ $10^{\log_{\sqrt{3}}} 729 = x$ $x = \frac{4}{3}$	$x = 9$ $10^{\log_{11}} 121 = x$ $x = -2$	$x = \frac{1}{4}$ $x = 6$
$x = 4$ $10^{\log_{\frac{1}{2}}} \frac{1}{4} = x$ $\log_{27} x = \frac{2}{3}$	$x = -1$ $10^{\log_8} 16 = x$ $x = -4$	$\log_7 x = 21$ $10^{\log_{\sqrt{5}}} \frac{1}{5} = x$ $x = 27$	$x = 10$ $x = \frac{5}{4}$ $x = -5$	$x = \frac{2}{3}$ $\log_2 64 = x$
$x = 0$ $10^{\log_{\frac{1}{3}}} 81 = x$ $\log_{55} x = 0$	$x = \frac{3}{4}$ $10^{\log_x} \sqrt{3} = \frac{1}{6}$ $x = -3$	$10^{\log_8} x = 3$ $x = 3$ $x = \frac{4}{5}$	$x = 1$ $10^{\log_{81}} 3 = x$ $x = 2$	$x = \frac{1}{3}$ $\log_4 x = 6$