

Logarithmic Equations Cut Out Puzzle

All bases are positive.

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

$\log_6 x = 17$ $\log_x \sqrt{7} = \frac{1}{2}$ $\log_3 x = 5$	$x = 11$ $\log_{17} x = 6$ $x = 7$ $\log_x 1000 = 3$	$x = 6$ $\log_5 x = 7$ $x = \frac{1}{2}$ $\log_5 125 = x$	$x = 8$ $\log_8 2 = x$ $x = 7$ $\log_7 x = 5$
$x = 81$ $\log_{10} 0.001 = x$ $\log_{\sqrt{2}} x = 6$ $x = -6$	$x = 243$ $\log_9 27 = x$ $\log_x 16 = 2$ $x = \frac{4}{3}$ $x = \frac{4}{5}$	$x = 13$ $\log_{\sqrt{3}} 729 = x$ $\log_2 0.5 = x$ $x = -2$	$x = 9$ $\log_{11} 121 = x$ $x = 6$ $x = \frac{1}{4}$
$x = 4$ $\log_{\frac{1}{2}} x = \frac{1}{4}$ $\log_{27} x = \frac{2}{3}$ $x = -4$	$x = -1$ $\log_8 16 = x$ $\log_{23} 1 = x$ $x = 27$	$\log_7 x = 21$ $\log_{\sqrt{5}} \frac{1}{5} = x$ $\log_{16} 8 = x$ $x = -5$	$x = 10$ $x = \frac{5}{4}$ $\log_2 64 = x$ $x = \frac{3}{2}$
$x = 0$ $\log_{\frac{1}{3}} 81 = x$ $\log_{55} x = 0$ $x = -3$	$x = \frac{3}{4}$ $\log_x \sqrt{3} = \frac{1}{6}$ $\log_{\sqrt{3}} x = 8$ $\log_8 x = 3$	$x = 3$ $x = \frac{4}{5}$ $\log_4 x = 8$ $x = 2$	$x = 1$ $\log_{81} 3 = x$ $\log_4 x = 6$ $x = \frac{1}{3}$