

$-\frac{1}{4}\log x$	$\frac{2}{3}\log_3 27$	$2\log x - \log 3y$	$-4\log x$
$\log_a c = b \Leftrightarrow$	$-\frac{1}{2}\log_4 16$	2	$2\log 2 + \log 5$
$2\log_3 9 + 3\log_2 32$	$\frac{2}{3}\log_5 5 - \log_3 1$	$\log_b a = c \Leftrightarrow$	$\log \frac{x^2}{\sqrt[3]{y}}$
$\log \frac{1}{x^4}$	$\log_c a = b \Leftrightarrow$	$2\log x - \frac{1}{3}\log y$	$\frac{1}{3}\log_4 64$
$3\log 4 - 2\log 3$	19	$\frac{2}{3}$	$\log \frac{x^2}{3y}$
$\log 2$	$2\log_5 10 - \log_5 4$	$\log 20 - \log 5$	$\log 6 - \log 3$

1	$\frac{3}{5}\log_3 243$	$c^b = a$	$\log 3 + \log 4 - \log 2$
$\frac{1}{2}\log 81$	$\log \frac{1}{\sqrt[4]{x}}$	$a^c = b$	$a^b = c$
-1	$\log \frac{64}{9}$	$\log 6$	$\log_b c = a \Leftrightarrow$
2	$b^c = a$	$\log 45$	$\log 4$
$\log 20$	$\log_a b = c \Leftrightarrow$	3	Finish
$b^a = c$	$4\log 3 - \log 9 + \log 5$	Start	$\log 9$