



## Logarithms - Quotient Property - Division as Fraction To Difference (Variables)

1

$$\log_p \frac{m}{r}$$

Convert the given logarithm to its equivalent based on the quotient property

A	B
$\log_p m - \log_p r$	$\log_p r - \log_p m$

2

$$\log_p \frac{y}{n}$$

Convert the given logarithm to its equivalent based on the quotient property

A	B
$\log_p n - \log_p y$	$\log_p y - \log_p n$

3

$$\log_p \frac{q}{w}$$

Convert the given logarithm to its equivalent based on the quotient property

A	B
$\log_p q - \log_p w$	$\log_p w - \log_p q$

4

$$\log_t \frac{z}{m}$$

Convert the given logarithm to its equivalent based on the quotient property

A	B
$\log_t m - \log_t z$	$\log_t z - \log_t m$

5

$$\log_z \frac{p}{w}$$

Convert the given logarithm to its equivalent based on the quotient property

A	B
$\log_z w - \log_z p$	$\log_z p - \log_z w$

6

$$\log_p \frac{n}{x}$$

Convert the given logarithm to its equivalent based on the quotient property

A	B
$\log_p n - \log_p x$	$\log_p x - \log_p n$

7

$$\log_m \frac{y}{q}$$

Convert the given logarithm to its equivalent based on the quotient property

A	B
$\log_m q - \log_m y$	$\log_m y - \log_m q$

8

$$\log_p \frac{n}{m}$$

Convert the given logarithm to its equivalent based on the quotient property

A	B
$\log_p m - \log_p n$	$\log_p n - \log_p m$