



Algebra with Logarithms - Binomial over Binomial and Constant



1

Simplify and solve for w

$$\log_2 \left(\frac{4w + 8}{5w - 8} \right) = 3$$

A

$w = 4$

B

$w = 2$

C

$w = 1$

D

$w = 3$

2

Simplify and solve for w

$$\log_2 \left(\frac{3w + 5}{5w - 4} \right) = 3$$

A

$w = 0$

B

$w = 1$

C

$w = 3$

D

$w = 2$

3

Simplify and solve for m

$$\log_3 \left(\frac{2m + 7}{3m - 2} \right) = 2$$

A

$m = 3$

B

$m = 1$

C

$m = 2$

D

$m = 0$

4

Simplify and solve for p

$$\log_2 \left(\frac{9p + 6}{4p - 5} \right) = 3$$

A

$p = 2$

B

$p = 1$

C

$p = 3$

D

$p = 4$

5

Simplify and solve for m

$$\log_2 \left(\frac{3m - 9}{2m - 6} \right) = 5$$

A

$m = 3$

B

$m = 5$

C

$m = 4$

D

$m = 2$

6

Simplify and solve for x

$$\log_2 \left(\frac{6x - 4}{2x - 3} \right) = 3$$

A

$x = 3$

B

$x = 2$

C

$x = 4$

D

$x = 1$

7

Simplify and solve for m

$$\log_2 \left(\frac{9m + 7}{5m - 3} \right) = 3$$

A

$m = 1$

B

$m = 3$

C

$m = 2$

D

$m = 0$

8

Simplify and solve for q

$$\log_3 \left(\frac{5q - 7}{2q - 8} \right) = 2$$

A

$q = 6$

B

$q = 7$

C

$q = 4$

D

$q = 5$