



## Logarithm Algebra (Quotient Property) - To Answer (Coefficient 1)

1 Use the quotient rule to simplify this to a quadratic and solve for 'w'

$$\log_6(w + 2) - \log_6(w + 2) = \log_6(-1w)$$

A  $w = -1$  B  $w = -11$

$$\log_7(m + 2) - \log_7(m + 2) = \log_7(1m)$$

Use the quotient rule to simplify this to a quadratic and solve for 'm'

A  $m = 1$  B  $m = -6$  C  $m = 9$

$$\log_5(q + 4) - \log_5(q - 2) = \log_5(1q)$$

Use the quotient rule to simplify this to a quadratic and solve for 'q'

A  $q = 12$  B  $q = -4$  C  $q = 4$

$$\log_7(w + 3) - \log_7(w + 3) = \log_7(1w)$$

Use the quotient rule to simplify this to a quadratic and solve for 'w'

A  $w = -3$  B  $w = -8$  C  $w = 1$

$$\log_7(x + 3) - \log_7(x + 3) = \log_7(1x)$$

Use the quotient rule to simplify this to a quadratic and solve for 'x'

A  $x = 2$  B  $x = -5$  C  $x = 1$

$$\log_4(z + 3) - \log_4(z - 1) = \log_4(1z)$$

Use the quotient rule to simplify this to a quadratic and solve for 'z'

A  $z = 3$  B  $z = -2$  C  $z = -3$

7 Use the quotient rule to simplify this to a quadratic and solve for 'x'

$$\log_3(x + 7) - \log_3(x + 7) = \log_3(1x)$$

A  $x = 10$  B  $x = 1$

8 Use the quotient rule to simplify this to a quadratic and solve for 'q'

$$\log_5(q + 11) - \log_5(q + 11) = \log_5(1q)$$

A  $q = 1$  B  $q = -4$