



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

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

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

A	B	C
$m = 7$	$m = -7$	$m = 1$

$$2 \log_{10}(y + 6) - \log_{10}(y + 4) = \log_{10}(-1y)$$

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

A	B	C
$y = -7$ $y = -7$	$y = -6$ $y = -10$	$y = -2$ $y = -3$

$$3 \log_6(z + 3) - \log_6(z - 1) = \log_6(1z)$$

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

A	B	C
$z = 3$	$z = 6$	$z = 7$

$$4 \log_3(x + 10) - \log_3(x + 4) = \log_3(1x)$$

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

A	B	C
$x = 4$	$x = 6$	$x = 2$

$$5 \log_8(z + 9) - \log_8(z + 9) = \log_8(1z)$$

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

A	B	C
$z = -1$	$z = 1$	$z = 7$

$$6 \log_9(t + 2) - \log_9(t + 2) = \log_9(1t)$$

Use the quotient rule to simplify this to a quadratic and solve for 't'

A	B	C
$t = 1$	$t = 7$	$t = 6$

$$7 \log_4(y + 9) - \log_4(y + 1) = \log_4(1y)$$

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

A	B	C
$y = 9$	$y = 3$	$y = -1$

$$8 \log_2(z + 7) - \log_2(z + 7) = \log_2(-1z)$$

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

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