



## Logarithm Algebra (Power Property) - To Quadratic (Coefficient 1)

1 Use the power rule to simplify this to an equation with variable 'x'

$$2 \log_7(x - 6) = \log_7(4)$$

A  $(x - 12) = 16$

B  $(x - 6)^2 = 16$

C  $2(x - 6) = 16$

2 Use the power rule to simplify this to an equation with variable 'y'

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

A  $(y - 6)^2 = 16$

B  $2(y - 6) = 16$

C  $(y - 12) = 16$

3 Use the power rule to simplify this to an equation with variable 'm'

$$2 \log_3(m - 7) = \log_3(1)$$

A  $(m - 14) = 1$

B  $2(m - 7) = 1$

C  $(m - 7)^2 = 1$

4 Use the power rule to simplify this to an equation with variable 'm'

$$2 \log_2(m + 3) = \log_2(1)$$

A  $(m + 3)^2 = 1$

B  $2(m + 3) = 1$

C  $(m + 6) = 1$

5 Use the power rule to simplify this to an equation with variable 'm'

$$2 \log_{10}(m - 9) = \log_{10}(9)$$

A  $(m - 18) = 81$

B  $(m - 9)^2 = 81$

C  $2(m - 9) = 81$

6 Use the power rule to simplify this to an equation with variable 'n'

$$2 \log_2(n + 4) = \log_2(1)$$

A  $(n + 8) = 1$

B  $(n + 4)^2 = 1$

C  $2(n + 4) = 1$

7 Use the power rule to simplify this to an equation with variable 'w'

$$2 \log_3(w - 5) = \log_3(4)$$

A  $2(w - 5) = 16$

B  $(w - 5)^2 = 16$

C  $(w - 10) = 16$

8 Use the power rule to simplify this to an equation with variable 'm'

$$2 \log_9(m - 7) = \log_9(1)$$

A  $(m - 14) = 1$

B  $(m - 7)^2 = 1$

C  $2(m - 7) = 1$