In this section we will discuss

* Principals of Exponential and Logarithmic Equality.
* Solving Logarithmic Equations

## Principal of Exponential & Logarithmic Equality

Recall that exponentials and Logs are Inverse functions, in the same way that squares and square roots are inverse functions.

## The Principal of Exponential Equality

For any real number , where

 is equivalent to

## The Principal of Logarithmic Equality

For any logarithmic base , and for

 is equivalent to

Examples: Solve for the unknown.

1. 10
2. 2
3. No Solution
4. No Solution
5. 6
6. 17/2
7. 4
8. 3/2
9. 81
10. 64
11. 1/16
12. 1/125