# Logarithms

### Aim:

To discover a weakness in your armoury of functions

### Activity:

Solve the following equations

1. 
2. 
3.  and .

### Aim:

To create a new inverse function to solve the equation (and many similar equations)

### Activities:

Example using direct comparison with square / cube root function

### Aim:

To gain familiarity with this new function

### Activities:

MEI Exercise 11A Q1-3

Or Worksheet – The Music of the Forest

### Aim:

To learn how this new function works under the standard operations of arithmetic.

### Activities:

Developing the rules: Worksheet – The Rules of the Forest

Using them: MEI Exercise 11A Q4-6

Worksheet – Using the rules of the forest

Game: <http://www.integralmaths.org/games/Logs_Maze/>

Extension: Hexagon Puzzle

### Check:

Mini-whiteboards

### Aim:

To use the log function to solve equations (back to the original aim)

### Activities:

Examples:

Worksheet – Equations using Logarithms

### Extensions:

logs 3 equations harder

logs 3 RISP