

Section 1: Exponential functions and logarithms

Crucial points

- 1. Make sure that you know the equivalent log relationships**
It can be difficult to develop a “feel” for logarithms. Keep the equivalent relationships $\log_a b = c \Leftrightarrow a^c = b$ firmly in mind, remembering that the base of the logarithm is also the base of the index. The value of $\log_a b$ is the answer to the question: “What power must I raise a to in order to get b ?”
- 2. Remember the log laws**
Make sure that you know the laws of logarithms. They are often useful for simplifying expressions.
- 3. Remember that exponentials and logarithms are inverses of each other**
This is important in solving equations. Equations involving exponentials can be solved by taking logs of both sides, and equations involving logs can be solved using powers.