

0.1 Integrals

0.1.1 Methods of integration

Trigonometric substitution

Inverse function integration function integration

Anti-derivative

Taking the derivative of a function provides another function. The anti-derivative of a function is a function which, when differentiated, provides the original function.

As this function can include any additive constant, there are an infinite number of anti-derivatives for any function.

Integration

Limit of summation

Show same as anti-derivative

Show properties of function same as summation (can take constants out etc)

0.1.2 Getting functions from derivatives

$$f(c) = f(a) + \int_a^c \frac{\delta}{\delta x} f(x) dx$$

Definite integration

Indefinite integration