Integral Reference Sheet

Properties

- Use algebra and these properties to manipulate your equation until it looks like the identities

Factoring out a constant: $\int cf(x)dx = c\int f(x)dx$

Distributing the integral signs: $\int [f(x)+g(x)]dx = \int f(x)dx + \int g(x)dx$

Integral Identities

- Use integral identities to get rid of the integration symbol and the dx

Power Rule for Integrals: $\int x^n dx = \frac{x^{n+1}}{n+1} + c$ n≠-1

Integral of 1/x: $\int \frac{1}{x} dx = \ln|x| + c$

Integral of e^x: $\int e^x dx = e^x + c$

Integral of sin(x): $\int \sin(x)dx = \cos(x) + c$

Integral of cos(x): $\int \cos(x)dx = -\sin(x) + c$