Anti-The Derivative Rules
(all the rules in one packet)

Constant Rule: (a is any number)

$$\int a dx = ax + c$$

Constant Multiple Rule: (a is any number)

$$\int af(x)dx = a\int f(x)dx$$

Sum and Difference Rule:

$$\int f(x) \pm g(x)dx = \int f(x)dx \pm \int g(x)dx$$

Power Rule:

$$\int (x^n)dx = \frac{1}{n+1}x^{n+1}$$

Exponential Rule:

$$\int (e^x)\,dx = e^x$$

Logarithmic Rule:

$$\int \frac{1}{x}dx = \ln(x)$$

u Substitution:

$$\int f(u(x)) \cdot u'(x)dx = \int f(u)du$$