UV rule	Partial Fractions
$\int (UV)\, dx = U \int V dx - \int \left[U' \int V dx\right] dX + c$	
ILATE $Stands\ for \begin{cases} I = Inverse\ functions \\ L = Logarithmic\ \ functions \\ A = Algebaic\ unctions \\ T = Trigonmetric\ functions \\ E = Exponetial\ functions \end{cases}$	1. $\int \frac{x+p}{(x-a)(x-b)} dx = \int \frac{A}{x-a} + \frac{B}{x-b}\, dx = A \int \frac{1}{x-a} dx + B \int \frac{1}{x-b} dx$ 2. $\int \frac{x+p}{(x-a)^2} dx = \int \frac{A}{x-a} + \frac{B}{(x-a)^2} dx = A \int \frac{1}{x-a} dx + B \int \frac{1}{(x-a)^2} dx$ 3. $\int \frac{x+p}{(x^2+a)(x-b)} dx = \int \frac{A}{x-b} + \frac{Bx+C}{(x^2+a)}\, dx$ $= A \int \frac{1}{x-b} dx + B \int \frac{x}{(x^2+a)} dx + C \int \frac{1}{(x^2+a)}\, dx$ 4. $\int \frac{x+p}{(x^2+a)^2} dx = \int \frac{Ax+B}{(x^2+a)} + \frac{Cx+D}{(x^2+a)^2}\, dx$ $= A \int \frac{x}{(x^2+a)} dx + B \int \frac{1}{(x^2+a)} dx + C \int \frac{x}{(x^2+a)^2} dx + D \int \frac{1}{(x^2+a)^2} dx$