Differentiation

Turning Point
Stationary Point
Maximum
Minimum

All mean that $\dfrac{dy}{dx} = 0$

$$If \ \frac{d^2 y}{dx^2} > 0 \ minimum$$

$$If \ \frac{d^2 y}{dx^2} < 0 \ maximum$$

Integration

Area under curve between a and b = $\displaystyle\int_a^b y \, dx$