

# CALCULUS II

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## 1. Khai triển Taylor

- Displacement: Change in position of an object. We use the symbol  $\Delta x$  for displacement, where  $\Delta$  means "change." A vector quantity with units of distance.
- Distance: Total amount the object has moved. This depends on the whole path traveled, not just the starting and ending points. Distance traveled is always a non-negative number. A scalar quantity with units of distance.
- Equation:

$$\Delta x = x - x_0 \quad (1)$$

$\Delta x$  is displacement,  $x$  is the final position,  $x_0$  is the initial position.  
Displacement is the difference between the final and initial positions.

## 2. Average velocity and speed

$$\bar{v} = \frac{\Delta x}{\Delta t} \quad / \quad v_{arg} = \frac{d}{\Delta t}$$