Definition of an Inflection Point:

A function f has an inflection point at $(c, f(c))$ if

(1) $f''(c) = 0$ or $f''(c)$ does not exist, and if

(2) f changes concavity at $x = c$.

Point of Inflection

Let *f* be a functions whose second derivative exists on any interval. If *f* is continuous at $x = c$, $f''(c) = 0$ or $f''(c)$ is undefined, and $f''(x)$ changes sign at $x = c$, then the point $(c, f(c))$ is a point of inflection.