$$\Delta_n(x) = \sum_{k=1}^{n} b_k(x)$$

$$-\Delta_n(x) + \Delta(x) = \sum_{k=n+1}^{\infty} b_k(x)$$

$$|\Delta(x) - \Delta_n(x)| = \left| \sum_{k=n+1}^{\infty} b_k(x) \right| \leq \sum_{k=n+1}^{\infty} |b_k(x)| \leq \sum_{k=n+1}^{\infty} c_k$$

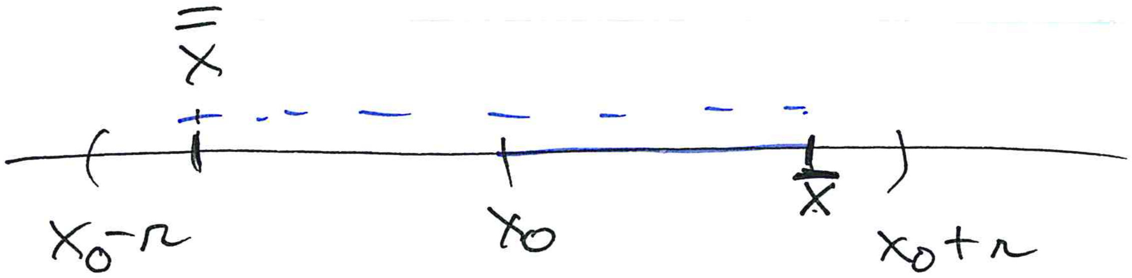
M-test: pokud existují c_k takové, že

$$(\forall x \in M)(|b_k(x)| \leq c_k)$$

$$\sum_{k=1}^{\infty} c_k < +\infty$$

pak $\sum_{k=1}^{n} b_k(x) \rightrightarrows \sum_{k=1}^{\infty} b_k(x)$ na M

Př: $\sum_{k=0}^{\infty} a_k(x-x_0)^k$



$c_k = |a_k(\bar{x}-x_0)^k|$

x je blíž k x_0 než $\bar{x}$

$|x-x_0| < |\bar{x}-x_0|$

potom $|\underbrace{a_k(x-x_0)^k}_{b_k}| < c_k$

Pē na $(\bar{\bar{x}}, \bar{x})$

$$\sum_{k=0}^{n} a_k(x-x_0)^k \rightrightarrows \sum_{k=0}^{\infty} a_k(x-x_0)^k$$