

Example

$$q(x) = \frac{1}{4}x^4 - x \rightarrow \min$$

$$p(x) = q'(x) = x^3 - 1 \rightarrow 0 \quad \text{necessary condition}$$

Newton - Iteration: $x_{k+1} = x_k - \frac{p(x)}{p'(x)}$

$$x_{k+1} = x_k - \frac{q'(x)}{q''(x)}$$

Return map

