$$D : x \geq 0$$

$$\sum_{n=1}^{\infty} \left(\sqrt[2n+1]{x} - \sqrt[2n-1]{x} \right) = \left(\sqrt[3]{x} - \sqrt[1]{x} \right) + \left(\sqrt[5]{x} - \sqrt[3]{x} \right) + \dots$$

$$\sum_{k=1}^{n} \sqrt[2k+1]{x} - \sum_{k=1}^{n} \sqrt[2k-1]{x} = \sqrt[2n+1]{x} - \sqrt[1]{x} + \sum_{k=1}^{n-1} \sqrt[2k+1]{x} - \sum_{k=2}^{n} \sqrt[2k-1]{x} = \sqrt[2n+1]{x} - \sqrt[1]{x}$$

$$\lim_{n\to\infty} \sum_{k=1}^{n} \left(\sqrt[2k+1]{x} - \sqrt[2k-1]{x} \right) = \lim_{n\to\infty} \sqrt[2n+1]{x} - \sqrt[1]{x} =$$