\[
\sqrt{1 + \sin 2x} = \frac{1}{2} \cdot \frac{1}{\sqrt{1 + \sin 2x}} \cdot D(1 + \sin 2x) = \\
= \frac{1}{2 \sqrt{1 + \sin 2x}} = \cos 2x \cdot 2 = \frac{\cos 2x}{\sqrt{1 + \sin 2x}} = \\
= \frac{\cos 2x}{\sqrt{\sin^2 x + \cos^2 x + 2 \sin x \cos x \cos x}} = \frac{\cos 2x}{\sqrt{\sin x + \cos x}}
\]
\[ d \bar{p}(x) = \bar{p}'(x) \Delta x \]

\[ \log_2 200 = \log_2 (200 + 92) = 7.6 \]

\[ p(x) = \begin{cases} 
-x^2 + 8 & \text{si } x < -\pi \\
-x & -\pi \leq x \leq 0 \\
\sqrt{x} & 0 < x < 1 \\
x & x \geq 1
\end{cases} \]

\[ p(-\pi) = \lim_{x \to -\pi} (-x^2 + 8) = -1.87 \]
\[ p(\pi) = \lim_{x \to \pi} (-x) = 0 \]

Saltos de función

Descontinuidad 1° especie

\( p(x) \) es \( C^1 \) en \( \mathbb{R} \setminus \{-\pi\} \)
\[
\text{For } x = \begin{cases} 
-2x & x < -\pi \\
\cos x & -\pi \leq x \leq 0 \\
1 & 0 < x < 1 \\
\frac{1}{2(x)} & x \geq 1
\end{cases}
\]