Encontrar $\lim\limits_{x\to 0_+} \dfrac{x}{\sqrt{1-\cos x}}$.

$$\frac{x}{\sqrt{1-\cos x}} \overset{x\in\left]0,\frac{\pi}{2}\right[}{=} \frac{x\sqrt{1+\cos x}}{\sin x}$$

$$\lim_{x\to 0_+} \frac{x\sqrt{1+\cos x}}{\sin x} = \lim_{x\to 0_+} \frac{x}{\sin x}^{\to 1} \cdot \lim_{x\to 0_+} \sqrt{1+\cos x} = \sqrt{2}$$

Documento compilado em Thursday 13th March, 2025, 05:21, tempo no servidor.

Sugestões, comunicar erros: "a.vandre.g@gmail.com".