

$$\begin{aligned} \frac{-30}{115} \lim_{x \rightarrow 0} \frac{\sqrt{1+\sin^2 x} - \cos x}{x^2} &= \lim_{x \rightarrow 0} \frac{\sqrt{1+\sin^2 x} + \cos x}{\sqrt{1+\sin^2 x} + \cos x} = \lim_{x \rightarrow 0} \frac{1 + \sin^2 x - \cos^2 x}{x^2 (\sqrt{1+\sin^2 x} + \cos x)} = \lim_{x \rightarrow 0} \frac{2 \sin^2 x}{x^2 (\sqrt{1+\sin^2 x} + \cos x)} \\ &= \lim_{x \rightarrow 0} \frac{2}{\sqrt{1+\sin^2 x} + \cos x} = \frac{2}{1+1} = 1 \end{aligned}$$