

EJERCICIO MIBE3285:

"achiimageo.com"

$$\frac{\sqrt{1-x} + \frac{1}{\sqrt{1+x}}}{1 + \frac{1}{\sqrt{1-x^2}}} =$$

$$= \frac{\frac{\sqrt{1+x} \cdot \sqrt{1-x} + 1}{\sqrt{1+x}}}{\frac{\sqrt{1-x^2} + 1}{\sqrt{1-x^2}}} =$$

$$= \frac{(\sqrt{1+x} \cdot \sqrt{1-x} + 1) \sqrt{1-x^2}}{\sqrt{1+x} \cdot (\sqrt{1-x^2} + 1)} =$$

$\nearrow 1-x^2 = (1+x)(1-x)$

$$= \frac{(\sqrt{1+x} \cdot \sqrt{1-x} + 1) \sqrt{(1+x) \cdot (1-x)}}{\sqrt{1+x} \cdot (\sqrt{1-x^2} + 1)} =$$

$$= \frac{(\sqrt{1+x} \cdot \sqrt{1-x} + 1) \cancel{\sqrt{1+x}} \cdot \sqrt{1-x}}{\cancel{\sqrt{1+x}} \cdot (\sqrt{1-x^2} + 1)} =$$

$$= \frac{(\cancel{\sqrt{1+x} \cdot \sqrt{1-x}} + 1) \cdot \sqrt{1-x}}{\cancel{\sqrt{1+x} \cdot \sqrt{1-x}} + 1} = \sqrt{1-x}$$