

Precalculus

5-03 Verify Trigonometric Identities

Verifying Trig Identities

- Show that trig identities are _____ by _____ one side into the other side

Guidelines

- Work with _____ at a time. Start with the more _____ side.
- Try _____, add _____, square a _____, etc.
- Use fundamental _____
- If the above doesn't work, try rewriting in _____ and _____
- Try _____!

Verify $(1 + \sin \alpha)(1 - \sin \alpha) = \cos^2 \alpha$

Verify $\sin^2 \alpha - \sin^4 \alpha = \cos^2 \alpha - \cos^4 \alpha$

Verify $\frac{\cot^2 t}{\csc t} = \csc t - \sin t$

Verify $\frac{1}{\sec x \tan x} = \csc x - \sin x$

Verify $\frac{\cos \theta \cot \theta}{1 - \sin \theta} - 1 = \csc \theta$