Accel Precalc Handout: Verify Trig Identities Name _____
Unit 7: Trig Identities and Equations
Lesson 2: Verify Trig Identities

EQ:

RECALL: Reciprocal and Pythagorean Identities

- Reciprocal Identities

- Pythagorean Identities

❖ Co-Function Identities

❖ Steps to Verify Trig Identities:

- Algebraically _____ one _____ of the _____ to make it _____ other _____.

- Algebraically _____both _____ of the _____ to make them _____ like each _____.

❖ RULES:

- Cannot _____ values from one side of _____ to the other. This would imply the statement is _____ --- that is what you are trying to _____.

- Use trig identities to _____ one or both _____ of the expressions until the statement is _____.

Ex. Use trig identities to verify these statements.

1. $\tan^2\theta + \cos^2\theta + \dfrac{1}{\csc^2\theta} = \sec^2\theta$

2. $\sec\beta\csc\beta = \tan\beta + \cot\beta$

3. $\dfrac{1+\tan\theta}{1+\cot\theta} = \tan\theta$

4. $\dfrac{\sin\theta}{1+\cos\theta} + \dfrac{1+\cos\theta}{\sin\theta} = 2\csc\theta$

5. $\dfrac{\tan\beta+\cot\beta}{\sec\beta\csc\beta}=1$

6. $\dfrac{1-\sin\theta}{\cos\theta}=\dfrac{\cos\theta}{1+\sin\theta}$

Assignment: Worksheet #1 Verifying Trig Identities

Worksheet #2 Verifying Trig Identities