

Name: _____

Date: _____

Learning Goal 6.1

Using identities to reduce complexity in expressions and solve equations.

More Questions

1. Prove. State any non – permissible values.

a.
$$\frac{1 - \cos \alpha}{\sin \alpha} = \frac{\sin \alpha}{1 + \cos \alpha}$$

b.
$$\frac{1}{1 - \sin \theta} = \frac{1 + \sin \theta}{\cos^2 \theta}$$

c.
$$\frac{\sin x + \tan x}{\cos x + 1} = \frac{\sec x}{\csc x}$$

d.
$$\frac{\cos x}{1 - \sin x} = \frac{1 + \sin x}{\cos x}$$

e.
$$\frac{\cos \theta}{1 - \sin \theta} + \frac{\cos \theta}{1 + \sin \theta} = \frac{2}{\cos \theta}$$