

name: _____

Assignment 4

Math621B

due November 29, 2021

Please do a nice copy of these proofs – give me your best work.

Prove the following trig identities. You must use the LS and RS format.

1. $\tan \theta (1 + \cos 2\theta) = \sin 2\theta$

2. $\frac{\tan x + \cot x}{\sec^2 x} = \cot x$

3. $\frac{1-\cos 2A}{1+\cos 2A} = \tan^2 A$

4. $\cot x - 2 \cot 2x = \tan x$