

Name: _____

Offline HW 3

This offline assignment is due **March, 5**. No extensions will be given.

The overall look of your paper will count toward your grade. Submissions on other paper will not be graded.

This must be **YOUR work**; you are not allowed to ask tutors, friends or family members for help. You CAN however consult with your classmates. If you choose to do so, each of you must submit a separate paper and the name of the person(s) with whom you collaborated must be written on this paper. The papers that are **suspiciously identical will receive 0 credit**.

Verify the identities:

1. $\frac{\sin t}{\tan t} + \frac{\cos t}{\cot t} = \sin t + \cos t$

2. $\sec^2 x \csc^2 x = \sec^2 x + \csc^2 x$

3. $\cos^4 t - \sin^4 t = 1 - 2 \sin^2 t$

4. $(\sec x - \tan x)^2 = \frac{1 - \sin x}{1 + \sin x}$