Algebra 2 Trig Name _____

WS 14-4 Period _____ Date _____

Verify that each of the following is an identity:

1. $1+\frac{1}{\cos\theta}\stackrel{?}{=}\frac{\tan^2\theta}{\sec\theta-1}$	2. $\csc\theta\cdot\sec\theta\stackrel{?}{=}\cot\theta+\tan\theta$
3. $\frac{\tan^2\theta}{1-\cos^2\theta}\stackrel{?}{=}\frac{\sec\theta}{\cos\theta}$	4. $(1+\sin\theta)(1-\sin\theta)\stackrel{?}{=}\frac{1}{\sec^2\theta}$

5. $\frac{\cos^2\theta}{1-\sin\theta} \stackrel{?}{=} 1+\sin\theta$	6. $\sin^2\theta(\csc^2\theta+\sec^2\theta) \stackrel{?}{=} \sec^2\theta$
7. $\sin\theta+\cos\theta \stackrel{?}{=} \frac{1+\tan\theta}{\sec\theta}$	8. $\frac{\sin\theta}{1-\cos\theta}+\frac{1-\cos\theta}{\sin\theta} \stackrel{?}{=} 2\csc\theta$