

**PC 6-4 Another day of practice for the pesky identities problems.**

Establish the identity

1. $\frac{1}{1-\sin\theta} + \frac{1}{1+\sin\theta} = 2\sec^2\theta$	2. $\frac{\sin\theta}{1-\cos\theta} + \frac{1-\cos\theta}{\sin\theta} = 2\csc\theta$	3. $\frac{\cos\theta}{1+\sin\theta} + \frac{1+\sin\theta}{\cos\theta} = 2\sec\theta$
4. $\frac{\sec^2\theta\csc\theta}{\sec^2\theta + \csc^2\theta} = \sin(\theta)$	5. $\frac{1}{\sec\theta-1} - \frac{1}{\sec\theta+1} = 2\cot^2\theta$	6. $\frac{\tan\theta}{1+\sec\theta} + \frac{1+\sec\theta}{\tan\theta} = 2\csc\theta$

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