

1. Change each function to sines and/or cosines and simplify: $\tan\theta\csc\theta$

2. Add and simplify: $\frac{\sin\theta + \cos\theta}{\cos\theta} + \frac{\cos\theta - \sin\theta}{\sin\theta}$

3. Multiply and simplify: $\frac{(\sin\theta + \cos\theta)(\sin\theta + \cos\theta) - 1}{\sin\theta\cos\theta}$

4. Factor and simplify: $\frac{3\sin^2\theta + 4\sin\theta + 1}{\sin^2\theta + 2\sin\theta + 1}$