

§5.1A: Fundamental Identities

“I WILL...

...use identities to evaluate and simplify trig functions”

I. Steps

- A. Apply these identities
- B. Reduce if possible
- C. Simplify the answer to the fullest

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| Ex 1: Simplify $\tan t \cos t$ | Your Turn: Simplify $\csc x \tan x$ |
| Ex 2: Simplify $\tan^2 \theta \cdot \cos^2 \theta + \cos^2 \theta$ | Ex 3: Simplify $\frac{\sec^2 \theta - \tan^2 \theta}{\tan^2 \theta}$ |

Ex 4: Simplify $\sin\left(\frac{\pi}{2} - \theta\right) \csc \theta$

Ex 5: Simplify $\frac{\sin \theta}{\cos \theta} + \frac{\cos \theta}{1 + \sin \theta}$

Your Turn: Simplify $\frac{\tan t + \cot t}{\tan t}$