

Name : _____

Simplify

Sheet 1

Simplify each expression using trigonometric fundamental identities.

1) $\frac{\cos x}{1 - \sin^2 x}$

2) $\cot x \sin x$

3) $\sin^2 x (1 + \cot^2 x)$

4) $\sin x \cos^2 x - \sin x$

5) $\frac{\tan x}{\sec x}$

6) $\tan(90^\circ - x) \sec x$

7) $\cos x + \sin x \tan x$

8) $\frac{\csc x}{\sec x}$

Name : _____

Answer key

Sheet 1

Simplify

Simplify each expression using trigonometric fundamental identities.

1) $\frac{\cos x}{1 - \sin^2 x}$

sec x

2) $\cot x \sin x$

cos x

3) $\sin^2 x (1 + \cot^2 x)$

1

4) $\sin x \cos^2 x - \sin x$

$-\sin^3 x$

5) $\frac{\tan x}{\sec x}$

sin x

6) $\tan(90^\circ - x) \sec x$

csc x

7) $\cos x + \sin x \tan x$

sec x

8) $\frac{\csc x}{\sec x}$

cot x