5-1 Trigonometric Identities

Simplify each expression.

22. $\csc x \sec x - \tan x$

ANSWER:

$\cot x$

23. $\csc x - \cos x \cot x$

ANSWER:

$\sin x$

25. $\frac{tanx + sinxsecx}{cscxtanx}$

ANSWER:

$2 \sin x$

26. $\frac{1sin2x}{csc2x1}$

ANSWER:

$\sin^2 x$

29. $\frac{sec2x}{cot2x+1}$

ANSWER:

$\tan^2 x$

30. $\cot x - \csc^2 x \cot x$

ANSWER:

$-\cot^3 x$

89. Which of the following is equivalent to $\frac{1-sin2\theta}{1-cos2\theta} \cdot \tan \theta$?

A $\tan \theta$
B $\cot \theta$
C $\sin \theta$
D $\cos \theta$

ANSWER:

B