Simplifying Trigonometric Expressions

Simplify each expression.

1) $\dfrac{\sin x}{\tan x}$

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2) $\sec^2 x - \tan^2 x$

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3) $\csc^2 x \sin^3 x$

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4) $\dfrac{\cos x}{\sec x}$

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5) $\dfrac{1 - \sin^2 x}{\sin^2 x}$

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

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7) $\dfrac{\tan x \cos^2 x}{\sec x}$

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8) $\cot^2 x (\sec^2 x - 1)$

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