Sum and Difference Formulas

Trigonometry

# Double-Angle Formulas

## The Formulas

## Examples

1. Simplify to one trigonometric expression.
2. Simplify the expression. Do not evaluate.
3. Establish the identity.
4. Establish the identity.

# Reduction Formulas

## The Formulas

## Example

1. Rewrite the expression with an exponent no higher than 1. .

# Half-Angle Formulas

## The Formulas

## Examples

1. Find the exact value using half-angle formuals.

# Product-to-Sum Formulas

## The Formulas

## Examples

1. Rewrite the product as a sum or difference.
2. Evaluate using a sum or difference of two functions.
3. Prove the identity.

# Sum-to-Product Formulas

## The Formulas

## Example

1. Rewrite the sum or difference as a product.