Section 7.4 Sum and Difference Formulas

Objective: In this lesson you learned how to use sum and difference formulas to rewrite and evaluate trigonometric functions.

I. Using Sum and Difference Formulas (Pages 568–571)

List the sum and difference formulas for sine, cosine, and tangent.

Example 1: Use a sum or difference formula to find the exact value of tan 255°.

Example 2: Find the exact value of cos 95° cos 35° + sin 95° sin 35°.

A reduction formula is . . .

Example 3: Derive a reduction formula for \( \sin \left( t + \frac{\pi}{2} \right) \).
Example 4: Find all solutions of \( \cos(x - \frac{\pi}{3}) + \cos(x + \frac{\pi}{3}) = 1 \)
in the interval \([0, 2\pi)\).

Additional notes

Homework Assignment

Page(s)

Exercises