Functions involving multiple angles can be solved using the following techniques.

Example 1: Find <u>all</u> solutions of the equation.

a.
$$\sin 2x - \frac{\sqrt{3}}{2} = 0$$

b.
$$\cos 2x = -\frac{\sqrt{2}}{2}$$

c.
$$\tan \frac{x}{2} - 1 = 0$$

Example 2: Use inverse functions to find all solutions.

 $4\tan^2 x + 5\tan x = 6$

Homework: Lesson 5.3 Day 3 pages 394-395 #39-44 all, 63-73 odd and the Practice 5-3 Worksheet