Solving Trig Equations

Always check your results for extraneous solutions!

Quadratic type:

$$2\sin^2 x - \sin x - 1 = 0$$

Solve by factoring:

$$\csc^4 x - 4\csc^2 x = 0$$

Solve by combining like terms:

$$\sin x + \sqrt{2} = -\sin x$$

Solve with square roots:

$$3\tan^2 x - 1 = 0$$