

## Section 12.6

### Systems of Nonlinear Equations

### COMMENTS ON SOLVING NONLINEAR SYSTEMS

- If the system contains two variables and if the equations in the system are easy to graph, then graph them. By graphing each equation in the system, you can get an idea of how many solutions a system has and approximately where they are located.
- Extraneous solutions can creep in when solving nonlinear systems, so it is imperative that all apparent solutions be checked.

### SOLVING A NONLINEAR SYSTEM

Nonlinear systems can be solved by the same two methods used to solve linear systems.

- Method of Substitution
- Method of Elimination