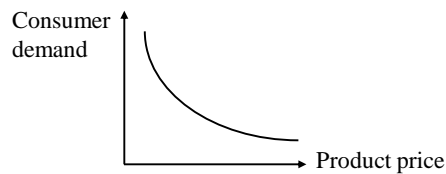


## Nonlinear Programming

- Examples of nonlinear relationships
  - Consumer demand as a function of product price



## Example: Rating College Football Teams

- Sports fans always wonder which team is best in a given sport. You might be surprised to learn that Solver can be used to rate sports teams.
- In this example, we use a nonlinear programming model to rate college football teams.
- We obtain the results of college football games during the 2012 regular season and entered the data into a spreadsheet.
- Our goal is to determine a set of ratings for the 124 NCAA Division I FBS teams that most accurately predicts the actual outcomes of the games played.