"It's a Nonlinear World. World of Sports and Nonlinear Equations" by Richard H. Enns reviewed by ..., group ..., English teacher: ... Department of Differential Equations

- 1. There are many nonlinear phenomena in our world and therefore nonlinear equations can describe almost everything around us, especially the motion of objects.
- 2. Scientists have carried out special research into the trajectory of different sport balls and derived the size and shape of a perfect ball.
- 3. Amazingly, calculations show that a shuttlecock turns out to be the fastest of all other balls.
- 4. Another aspect of the problem is to study how famous football players manage to kick the ball into the goal when it is blocked by other players.
- 5. The trajectory of a baseball has been analysed to understand the motion of a ball flying with much spin.
- 6. In golf, an unusual design of a golf club and a ball determines how far the ball can fly and how it can get into the hole.
- 7. Nonlinear equations can be found in other kinds of sport such as car racing, medieval archery, etc.
- 8. Further study of nonlinear equations can reveal many surprising things about the complex structure of our world.

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