

Sporting Goods Exercise Equipment 2003-2004

1. Can you identify holiday or seasonal periods that cause the spikes in the data?
Note that sudden dips in the data may reflect low stock periods.
2. a) Generate quadratic and cubic models for this data.

b) What is the marginal sales for this department using each model.

c) Which model do you feel best predicts future trends and explain your rationale.

d) Which model better predicts max and min values for the department? Compare actual and model generated max and min values. Show backup analytic work.
3. a) Compute the total sales for the exercise equipment, sporting goods department, and indoor games.

b) Find the weekly percentage of sales for the exercise equipment (exercise equipment divided by department sales). Provide backup

c) Graph and model the percent found in item b). Show appropriate backup material. Discuss adjustments to your model as required for different time(s) of the year.