

## Financial summary

1. Compute the rate of change of net sales for each year. At the start of 1995, the rate of increase during the previous year was 23.6%, i.e.  $\frac{78338 - 63367}{63367}$ .
2. Model the net sales data from 1994-2004.
3. a) What is your model and why did you choose it?  
b) Find the derivative of your model.  
c) Evaluate the derivative for the years 1994-2004.
4. Use your model of net sales data to predict net sales and rates of change for the next three years
5. Assuming that net income= profit, net sales = revenue, and profit= revenue – total cost, compute the total cost for the years 1994 to 2004.
6. Model the total cost data and evaluate the derivative of total cost for the years 1994-2004.
7. Using the models you like best for sales (item 2) and total cost (item 6), find the model for the profit (polynomial subtraction). Based on your profit model results, predict the rate of increase in percent of profits for the next three years.
8. Using the net income data in the 1994-2004 financial summary worksheet which includes data from the McLane Company, generate a model for the profit (net income) and based on your profit model results, predict the rate of increase in percent of profits for the next three years.
9. Compare results from items 7 and 8, i.e. discuss how your models in any way justify (or not) Wal\*Mart's sale of McLane Company, Inc.

Note: The financial data was obtained from [www.walmartstores.com](http://www.walmartstores.com). To access the specific site, then pull down the following menus: news-> general information-> annual reports-> 2004-> 2004 annual report.