

Spaghetti Palace

In-class Review

The total sales S (in millions of dollars) for the Spaghetti Palace for the years 1999 to 2005 are shown in the table.

Year	1999	2000	2001	2002	2003	2004	2005
Sales (S)	347	438	539	652	774	969	1178

- 1) Use a graphing calculator to create a scatter plot of the data. Let t represent the year with $t = 9$ corresponding to 1999. Sketch the graph.
- 2) Use the regression feature to find a linear model and a quadratic model for the data. Graph both models along with the scatter plot. Sketch the graph.
- 3) Which model is better? Justify your answer.
- 4) Use the better model to predict total sales in the year 2010.