Names $\qquad$ Hour $\qquad$

The table shows the average price $P$ (in dollars) for a personal computer from 1997 to 2002.

| Year, $t$ | Average Price, $P$ |
| :---: | :---: |
| 1997 | 1450 |
| 1998 | 1300 |
| 1999 | 1100 |
| 2000 | 1000 |
| 2001 | 900 |
| 2002 | 855 |

1. Use a graphing calculator to create a scatter plot of the data. Let $t$ represent the year, with $t=7$ corresponding to 1997.

2. Use the regression feature of your graphing calculator to find a linear model for the data. What is the coefficient of determination for this model (what is $r^{2}$ )?
3. Use the regression feature of your graphing calculator to find a quadratic model for the data. What is the coefficient of determination for this model (what is $r^{2}$ )?
4. Determine which model best fits the data and explain your decision.
5. Use the model you chose in \#5 to predict the average price for a personal computer in 2008. Does your answer seem reasonable? Explain.
