College Algebra: Business Flavor

Excel project with final.

Recall that each test has an Excel project that goes with it. Each Excel project is worth 5% of your course grade.

In an Excel workbook,

1. The data sheet has 7 columns, on for $x$ and one for the 6 functions $f(x)$, $g(x)$, $h(x)$, $m(x)$, $n(x)$, and $s(x).$ One of these functions is linear, one quadratic, one exponential, one power, one logarithmic, and one logistic. On each of 6 pages, put $x$ and one of the functions. On each page, add a scatterplot of the function.
2. Find a trendline equation for the linear, quadratic, exponential, power, and logarithmic functions. (We don’t know how to do a logistic trendline. You have to use the shape of the graph to figure out which column corresponds to which model.) Add a column for the predicted value. Find the $y$-intercept for each function where you have a trendline. It is the predicted value of the function when $x$ is 0.
3. For the quadratic function, find the roots and vertex.

Write a one-page or two-page summary, in word, that describes the functions and gives the intercepts.

(Note on the project: One of the stated goals of this class was that you be able to take data, decide on a model that corresponds to the data, produce a best fitting formula for the model, and use the model to make predictions and find interesting features. That is the final project. You should be showing me you can plot points, find a trendline, translate an equation from math into Excel, and use Goal Seek and Solver.)