## Cost of Tuition $=\mathbf{f}$ (time)

Here is some data from the World Almanac on the average cost of tuition and fees at public two-year colleges. 1991, \$824, 1992, \$937, 1993, \$1025, 1994, \$1125, 1995, $\$ 1192$, 1996, \$1330, 1997, \$1465, 1998, \$1567. Model cost of tuition as a function of time and extrapolate to estimate tuition and fees cost in 2004. Use the inverse function to predict when will be quadruple the 1991 level.

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Write an equation that models tuition as a function of time and solve it for $t$ to find the inverse function. Use this inverse function to predict in what year the cost would go above $\$ 2500$.

Use the back of the paper to write a description and create a system dynamics model.
Explain the strengths, weaknesses, and limitations of your model.

