

Name

Date

Score

Performance Task



Setting Goals

A factory produces components for game consoles. The new manager wants to set a goal for how many components will be produced in the upcoming year.

Show all your work to receive full credit.

Part A

The factory has existed for seven years. The chart below gives the number of components produced by the factory each year.

Year	Components
1	2,659,051
2	2,500,197
3	2,834,180
4	2,384,201
5	2,799,125
6	2,679,051
7	2,384,198

The factory manager needs to put the data in order so that he can make a decision on next year's goal. Order the data from least to greatest.

Part B

The factory manager asks his assistant manager to give input for the production goal. The assistant manager suggests 2,300,000 components. Explain why this goal may not be appropriate.

Part C

While the manager is tempted to set a new record producing more components than ever before, he knows that people are not buying as many components as they used to. He does not want to make more components than can be sold. He decides to set the goal of producing the third highest number of components in company history. Suggest a goal for the factory manager.

Part D

In researching the company financial reports, the factory manager discovers that the factory must produce at least 2,700,000 components in a year in order to make a profit. Does your goal from **Part C** meet this requirement? If so, explain why. If not, offer the factory manager a new goal that meets both requirements.

Part E

The factory manager's supervisor indicates that it is absolutely essential that the total number of components sold in years 6, 7, and 8 (the new year) be at least 7,709,000. Explain why the goal you gave the factory manager in **Part D** will also meet this new requirement.