

MATH 115 SESSION #35

The increase in the weight, in grams, of the aerial (above ground) portion of a growing sorghum plant during the 96 days after planting is recorded in the following table.

Days after Planting:	24	32	40	48	56	64	72	80	88	96
Weight in Grams:	2	5	9	15	32	50	66	72	82	83

Write up the following exercises:

- The data shows that the rate of growth in weight of the plant varies with the age of the plant. Produce a graph that shows the relationship between the weight of the aerial portion of the plant and the number of days since it was planted.
- Describe, in words, how the plant's rate of growth varies with its age.
- You probably noticed the characteristic, sigmoid (S-shaped), curve that represents the growth, in weight, of the plant over time. The limiting value for the weight of this particular plant, about 83 grams, is determined by the combined action of heredity and the environment.