

## Problem Set

1. Two classes took the same mathematics test. Summary measures for the two classes are as follows:

	Mean	MAD
<b>Class A</b>	78	2
<b>Class B</b>	78	10

- Suppose that you received the highest score in your class. Would your score have been higher if you were in Class A or Class B? Explain your reasoning.
  - Suppose that your score was below the mean score. In which class would you prefer to have been? Explain your reasoning.
2. Eight of each of two varieties of tomato plants, LoveEm and Wonderful, are grown under the same conditions. The numbers of tomatoes produced from each plant of each variety are shown:

Plant	1	2	3	4	5	6	7	8
<b>LoveEm</b>	27	29	27	28	31	27	28	27
<b>Wonderful</b>	31	20	25	50	32	25	22	51

- Draw dot plots to help you decide which variety is more productive.
- Calculate the mean number of tomatoes produced for each variety. Which one produces more tomatoes on average?
- If you want to be able to accurately predict the number of tomatoes a plant is going to produce, which variety should you choose—the one with the smaller MAD or the one with the larger MAD? Explain your reasoning.
- Calculate the MAD of each plant variety.