Boxplot

- Review: Consider the random sample of 21 patients that yielded the following data on length of stays, in days.

5	28	1	24	15	13	9
3	1	7	6	2	10	12
4	5	18	6	9	9	13

$$\{1,1,2,3,4,5,5,6,6,7,9,9,9,10,12,13,13,15,18,24,28\}$$

- **Five-number summary**

  1. Minimum - $X_{(1)}$
  2. First Quartile - Q_1 (lower fourth)
  3. Median - $\tilde{X}$
  4. Third Quartile - Q_3 (upper fourth)
  5. Maximum - $X_{(n)}$

- **Practice.** The following data set records 40 yearly charitable contributions (in dollars) to the United Fund for a group of employees at a public university. *Note that the data are arranged in increasing order.*

24	28	41	??	47	51	56	59	63	63
63	65	67	69	70	71	75	77	78	79
79	80	80	80	80	81	81	??	83	84
90	92	93	99	101	103	103	112	115	125

Obtain the 5-no. summary and construct the boxplot for this data set.

Homework.

1. Section 1.4: (pp. 43 - 45) # 55, 57, 61.