

## Indicators

### Objective:

**4.01 Collect, organize, analyze, and display data (including box plots and histograms) to solve problems.**

#### Vocabulary and Resources

box-and-whisker plot

quartile

lower quartile

first quartile

middle quartile/median

second quartile

upper quartile

third quartile

minimum value

maximum value

outlier

range

inter-quartile range

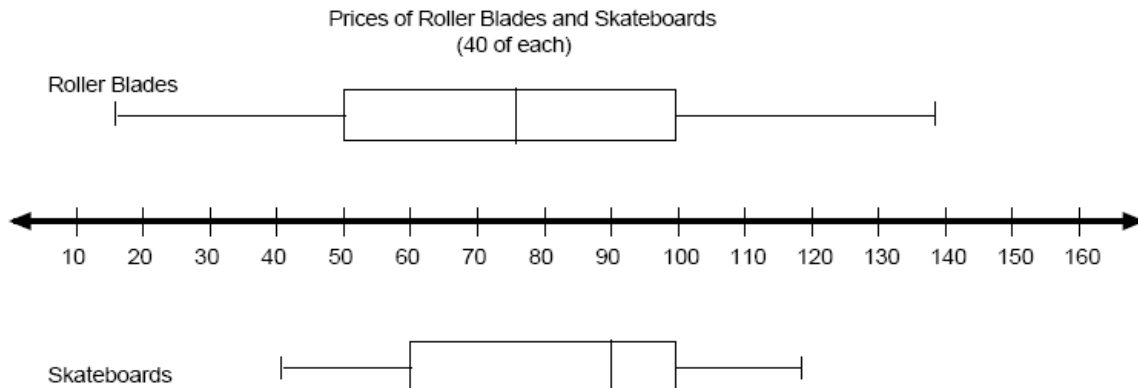
measures of central

tendency

frequency table

interval

- A.** Use the box plots below to answer the following questions.  
How does the median skateboard cost compare to the median roller blade cost? What percent of skateboards cost \$60 or more? What percent of roller blades cost between \$50 and \$100? How many of the roller blades and skateboards cost \$100 or more?



**B.** Maggie and Thom are members of the local year-round swim team and their weekly practice times are indicated below:

	Hours of Practice Time Each Week									
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
Thom	10.5	8	9.5	11	10	10	8.5	12	4	6.5
Maggie	10	11.5	7	12.5	11	9	8	9.5	8.5	12

Make a box plot for each of their practice times (one above and one below the same number line).

**C.** Listed below are the daily high temperatures ( $^{\circ}\text{F}$ ) for the first 20 days of April. Choose appropriate intervals to group the data, make a frequency table for the data, and construct a histogram for the data.

55, 62, 68, 75, 69, 78, 82, 79, 85, 88, 65, 60, 58, 75, 80, 82, 74, 78, 78, 72