$\qquad$
$\qquad$ Hour $\qquad$

## Worksheet 6.7 - Box-and-Whisker Plots - Textbook pages 375-381

## LEVEL 1

Match the data with the box-and-whisker plot.

$\qquad$ 1) $1,10,15,18,16,14,15,16,8,20$
__ 2 ) $6,2,3,8,1,2,5,6,8,20$
__3) $1,12,15,8,9,10,11,12,11,20$
4) $5,8,7,6,5,4,5,6,1,20$

Find the first, second, and third quartiles of the data. Show your work.
5) $16,5,8,9,14,11,7,13$
6) $72,78,65,94,86,80,76,90$

## LEVEL 2

Draw a box-and-whisker plot of the data. Show your work.
7) $79,85,36,46,55,98,44,105,67,75$

8) Average annual snowfall in the ten snowiest cities (in inches):
$100.8,97.1,116.1,102.2,240.8,129.2,110.0,97.8,114.0,104.9$


## LEVEL 3

The data shows the age of the Presidents of the United States at the time of their inauguration.

| 57 | 61 | 57 | 57 | 58 | 57 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 61 | 54 | 68 | 51 | 49 | 64 |
| 50 | 48 | 65 | 52 | 56 | 46 |
| 54 | 49 | 50 | 47 | 55 | 55 |
| 54 | 42 | 51 | 56 | 55 | 54 |
| 51 | 54 | 51 | 60 | 62 | 43 |
| 55 | 56 | 61 | 52 | 69 | 64 |
| 46 |  |  |  |  |  |

9) Make a stem-and-leaf plot to order the data.
10) Find the first, second, and third quartiles of the data. Show your work.
first quartile $=$ $\qquad$ second quartile $=$ $\qquad$
third quartile $=$ $\qquad$
11) Make a box-and-whisker plot of the data.

12) What does the plot tell you about the age of the Presidents?
13) A person must be 35 years old to be elected president. What would a new data point of 35 do to the box-and-whisker plot?

## LEVEL 4

Use the box-and-whisker plot that shows the amount of time (in hours) that adults spent exercising last week.

14) What was the median amount of time exercising?
15) Did the same number of adults spend 3-6 hours exercising as adults exercising 6-12 hours? Explain.

