

## Section 12.4 Extra Practice

For #1 and #2:

- a) Show the range and the median.
- b) Identify any outlier(s).
- c) Calculate the mean with and without the outlier(s).

Show your work.

1. 32, 39, 26, 11, 32, 34, 29 Ordered: \_\_\_\_\_

a) Range = \_\_\_\_\_ Median = \_\_\_\_\_

b) Outlier(s) = \_\_\_\_\_

c) Mean with outlier(s) = \_\_\_\_\_

Mean without outlier(s) = \_\_\_\_\_

2. 13, 11, 14, 30, 12, 11, 12, 32, 18 Ordered: \_\_\_\_\_

a) Range = \_\_\_\_\_ Median = \_\_\_\_\_

b) Outlier(s) = \_\_\_\_\_

c) Mean with outlier(s) = \_\_\_\_\_

Mean without outlier(s) = \_\_\_\_\_

For #3 and #4, identify the outlier(s), and decide whether or not to include them when calculating mean. Justify your answer.

3. Students in a Science class record the following temperatures for their beakers of heated water: 95°, 91°, 89°, 110°, 90°, and 93°.

All temperatures are in °C.

Outlier: \_\_\_\_\_ Should you include it? YES NO

Explain. \_\_\_\_\_

\_\_\_\_\_

4. A teacher measures the height of some Grade 7 students: 161, 152, 158, 167, 160, 140, 159, 155, 159, and 157. All measurements are in cm.

Outlier: \_\_\_\_\_ Should you include it? YES NO

Explain. \_\_\_\_\_

\_\_\_\_\_