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## 9 Family Letter

## Dear Parent or Guardian:

We are often overwhelmed with large amounts of data, but organizing data into tables and graphs can help us make sense of it all. Once the data are organized, we can identify patterns and make predictions. We can then make reasonable decisions based on the information we see. Knowing how to correctly interpret the statistics can help keep us from making incorrect decisions based on the data.
In Chapter 9, Statistics: Analyzing Data, your child will learn several different ways to describe, analyze, and interpret data. Your child will learn about line plots, measures of central tendency and range, stem-and-leaf plots, Venn diagrams, bar graphs, histograms, line graphs, scatter plots, and about selecting an appropriate display. Additionally, your child will learn to use a graph in solving problems and to wade through misleading statistics. In the study of this chapter, your child will complete a variety of daily classroom assignments and activities and possibly produce a chapter project.
By signing this letter and returning it with your child, you agree to encourage your child by getting involved. Enclosed is an activity you can do with your child that practices how the math we will be learning in Chapter 9 might be tested. You may also wish to log on to www.msmath2.com for self-check quizzes and other study help. If you have any questions or comments, feel free to contact me at school.

> Sincerely,
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## 9

## Family Activity

## State Test Practice

Fold the page along the dashed line. Work each problem on another piece of paper. Then unfold the page to check your work.

1. Find the median of the set of numbers on the stem-and-leaf plot below.

| stem | leaf |  |  |  |  |
| ---: | :--- | :--- | :--- | :--- | :--- |
| 0 | 1 | 4 | 7 |  |  |
| 1 | 8 | 9 |  |  |  |
| 2 | 3 | 5 | 6 | 6 |  |
| 3 | 0 | 0 | 0 | 1 |  |
| 4 | 2 | 3 |  |  |  |
| 5 | 4 | 6 |  | 1 |  |
|  |  | $8=18$ |  |  |  |

What number is the median?
A 25
C 30
B 26
D 31
2. Study the Venn diagram shown below.


Which of the following could describe the common area?
A common multiples of 4 and 12
B common multiples of 4 and 6
C common multiples of 4 and 8
D common multiples of 4 and 18 .

## Solution

1. Hint: The key indicates that the number on the left of the stem-and-leaf plot is the tens place and the numbers on the right of the line are the ones place. For example, the first line represents the numbers 1, 4, and 7. The median is the number in the middle of a set when the set is listed in ascending or descending order.

The median is the middle number in the set. There are 17 numbers in the set, so the middle is the 9 th number (there are eight numbers on either side of it in the set). The top left leaf represents the least number. Count each leaf in order to find the 9 th number. The median of this set is 26 .

## Solution

2. Hint: Find the smallest number in each circle and determine if the circle contains multiples of that number.

The lowest number on the left side of the diagram is 4 and all of the numbers on the left side are multiples of 4 . The lowest number on the right side of the diagram is 6 and all of the numbers on the right side of the diagram are multiples of 6 . The numbers in the common area of the diagram are multiples of both 4 and 6 .

