Name _____ **Date**_____

Intersection of Sets Lesson

A set is a group of distinct objects or data of some kind. A set can contain any kinds of data from names to numbers to places. In math, sets normally contain numbers in the form of data.

Look at the two sets below:

Set A {5, 12, 9, 7} **Set B {14, 6, 9, 4}**

Many times we want to be able to compare sets of data. One form of comparison is called an intersection. An intersection is shown by the symbol ∩ and tells the data that appears in both sets (A and B). If the intersection of Set A and B were to be written out mathematically it would appear as:

A ∩ B

You can think of the ∩ symbol as the word "and" because it asks us what data appears in Set A <u>and</u> Set B.

Now let's evaluate both sets to find the intersection. We are looking for data that appears in both Set A and Set B.

Set A {5, 12, 9, 7} **Set B {14, 6, 9, 4}**

The only value that appears in both sets is 9. We would write our answer as: A ∩ B = {9}