

Name _____

Date _____

Union of Sets Lesson 2

As we have seen in the previous lesson sets are just unique pieces of data that we can perform operations and report on.

A common operation with sets is finding the union of two sets. The union is shown by the symbol \cup . A union tells us all of the elements that are in one set or another set.

Look at the two sets below:

Set A {18, 8, 4, 9}

Set B {1, 17, 5, 4}

We could be asked to find the union of these two sets with the problem:

$A \cup B$

We can think of unions as “or” statements. We element is found in Set A or Set B. A union tells us to list all the data elements that you find between the two sets. In a way, we are bringing the sets together and listed each form of data only once.

Let's list all the data found in both sets first:

$A \cup B = \{18, 8, 4, 9, 1, 17, 5, 4\}$

We only want to list one element of each piece of data. We want to remove an data that we may have listed twice. In this case 4 is listed twice. We will want to remove one of the 4s.

$A \cup B = \{18, 8, 4, 9, 1, 17, 5, \cancel{4}\} = \{18, 8, 4, 9, 1, 17, 5\}$

