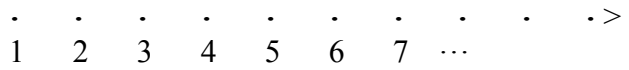
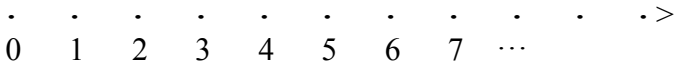
The Number Line

Do you remember the yellow and black number line above the board in your elementary classroom? We'll build it in steps to help students understand the development of our number system.

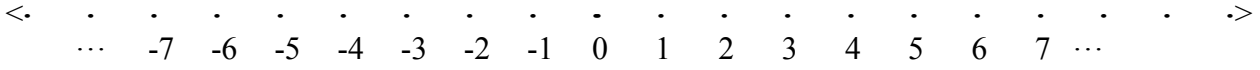
A primary number line would contain only the **Natural** (or Counting) **Numbers**, unconnected.



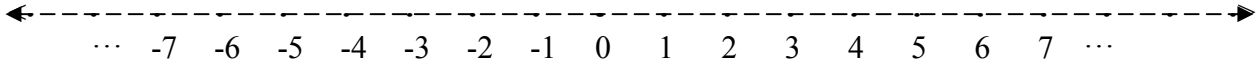
Next we add zero, and we have the set of **Whole Numbers**.



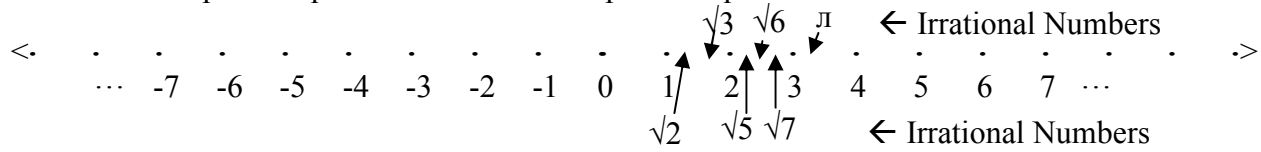
If we include the opposites (negative versions) of the natural numbers, we have **Integers.**



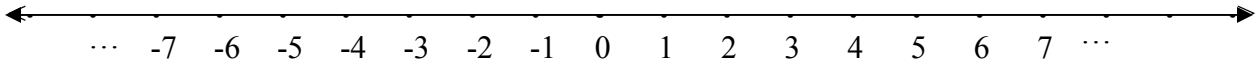
Now we insert the fractions, repeating decimals, and terminating decimals between the integers. This gives us the **Rational Numbers**. Our line is almost now a solid line.



Irrational Numbers are decimals which do NOT terminate and do NOT repeat. The best known are pi and square roots that are not perfect squares.



These examples will continue to left and right infinity.
When we place this number line over our Rational Number line, we have created the number line for the set of **Real Numbers.**



If we combine these **Real Numbers** with **Imaginary Numbers** (Those that aren't Real) such as the square root of negative numbers, we have the set of **Complex Numbers**. We could draw this number line if we knew where to place the imaginary numbers.

Since we don't, we won't. If you do, call us!