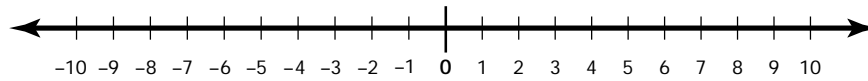


Comparing Integers on a Number Line

An **integer** is any whole number (0, 1, 2, 3, . . .) or its opposite. A good way to compare integers is with a *number line*, which is used to represent positive and negative numbers in order. A number line looks like this:



The farther a number is to the right on a number line, the greater the number. The farther a number is to the left on a number line, the smaller the number.

PROCEDURE: To compare integers on a number line, simply place your values on the line, with positive numbers to the right of zero and negative numbers to the left of zero. The number that is the farthest to the right is the greatest number. The number that is the farthest to the left is the smallest number.

SAMPLE PROBLEM: Which is greater, -8 or -3 ?

Step 1: Draw your number line and select a point for 0. Then fill in the integer values on the line.

Step 2: Place the integers you are comparing on the number line.

Because both numbers are negative, they will both be to the left of zero.

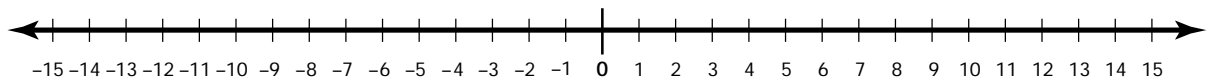


Because -3 is farther to the right than -8 , -3 is greater than -8 .

Practice Your Skills!

1. Locate the following integers on the number line. Then list them in order from smallest to greatest on the line below.

4, 12, -2 , 7, -5 , 2, -7 , 9, -13



2. Use a number line to correctly place the sign $>$ (greater than) or $<$ (less than) between the numbers in each of the following pairs.

a. 89 _____ 98 b. -89 _____ -98 c. -98 _____ -69

3. This table shows estimates of the mean temperatures on the surface of nine planets. List the planets on the line below in order from hottest to coldest.

Earth	Jupiter	Mars	Mercury	Neptune	Pluto	Saturn	Uranus	Venus
8°C	-150°C	-37°C	179°C	-225°C	-236°C	-185°C	-214°C	453°C

