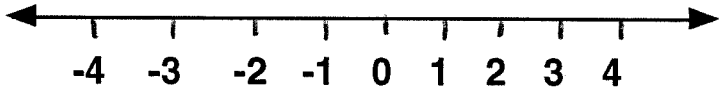
Integers

Include positive and negative numbers, as well as zero. Decimals and fractions are not integers.

I=(...-3, -2, -1, 0, 1, 2, 3...)

Integer number lines



***Numbers on the left are smaller than the numbers to the right.**

eg. $^{-}3<^{-}1$

Adding Integers

1. If the sign of the numbers are the same, add them together and keep the common sign.

eg. -6+-8=-14

2. If the sign of the numbers are different, find the difference between them and keep the sign of the number with the highest "face value".

eg. -7+8=1

Subtracting Integers

To subtract an integer add the opposite. This is called the additive inverse.

eg. $^{-}6-^{-}5$ becomes $^{-}6+^{+}5$ which equals -1

eg. $10-^{-}7 = 10+7 = 17$

eg. $3-20 = 3+^{-}20 = ^{-}17$

Multiplying and Dividing Integers

Product or quotient of two unlike signs is always negative and the product or quotient of two like signs is always positive.

eg. 5 x 10 = 50

eg. -4 x -6 = 24

eg. -12 x 3 = -36