Chapter 1: Integers, Class 1

## CLASS NOTES

## INTRODUCTION

## Integers

The set of integers, usually represented by Z, contains zero, negative numbers and positive numbers. That is,

Integers = Whole numbers + negative numbers
$Z=\{\ldots-3,-2,-1,0,1,2,3 \ldots\}$
Remember, integers do not include decimals or fractions.


## Integers on a Number Line



Mathematics

Chapter 1: Integers, Class 1
Grade 7

## Rules of Integers

## Adding Positive and Negative Integers

| Integer Sign | Operation | Answer Sign | Example |
| :---: | :---: | :---: | :---: |
| $\mathbf{+} \mathbf{+}$ | Add | $\mathbf{+}$ | $2+5=7$ |
| $\mathbf{+ -}$ | Add | - | $-2+(-5)$ <br> $=-2-5$ <br> $=-7$ |
| $\mathbf{+} \mathbf{+}$ | Subtract | Larger Integer's Sign | $2+(-5)$ <br> $=2-5$ <br> $=-3$ |
| $\mathbf{+} \mathbf{+}$ | Subtract | Larger Integer's Sign | $-2+5$ <br> $=3$ |

Subtracting Positive and Negative Integers

| Integer Sign | Operation | Answer Sign | Example |
| :---: | :---: | :---: | :---: |
| $+-+$ | Subtract | Larger Integer's Sign | $\begin{aligned} & 2-5 \\ & =-3 \end{aligned}$ |
|  | Subtract | Larger Integer's Sign | $\begin{aligned} & -2-(-5) \\ & =-2+5 \\ & =3 \end{aligned}$ |
|  | Add |  | $\begin{aligned} & 2-(-5) \\ & =2+5 \\ & =7 \end{aligned}$ |
|  | Add |  | $\begin{aligned} & -2-5 \\ & =-7 \end{aligned}$ |

