

## The Basics of Integers

$\{ \dots, -10, -9, -8, -7, -6, -5, -4, -3, -2, -1, 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, \dots \}$

Opposites

Absolute value

### Addition —

Rules:  $(+) + (+)$                        $(-) + (-)$                        $(+) + (-)$                        $(-) + (+)$

Methods/Models:

(1) Charged Field

(2) Chip Model

(3) Patterns

(4) Number Line

Properties:                       $-(a + b)$                        $-(-a)$

### Subtraction —

Methods/Models:

(1) “Add the opposite”

(2) Patterns

(3) Number Line

### Multiplication —

### Division —

Rules:  $(+)(+)$                        $(+)(-)$                        $(+)/(+)$                        $(+)/(-)$   
 $(-)(-)$                        $(-)(+)$                        $(-)/(-)$                        $(-)/(+)$

Methods/Models:

(1) Patterns

(2) Number Line

Properties:

$$(-1)a = -a$$

A negative number raised to an even power is \_\_\_\_\_ ;

A negative number raised to an odd power is \_\_\_\_\_ .