

Lesson 01: Whole Numbers

Whole Numbers and Place Value

Vocabulary

Number System	A way of naming numbers
Digits	Number symbols (numerals) 0, 1, 2, 3, 4, 5, 6, 7, 8, 9
Place Value	Position in a number
Decimal place-value system	Value of the position in the number is based on the number 10

Place Value:

Billions Group			Millions Group			Thousands Group			Ones Group		
Hundreds	Tens	Ones	Hundreds	Tens	Ones	Hundreds	Tens	Ones	Hundreds	Tens	Ones
7	4	9,	5	0	3,	2	1	8,	9	6	5

Seven hundred forty-nine billion, five hundred three million, two hundred eighteen thousand, nine hundred sixty-five

Standard (numerical) Form: 5,367

Expanded Form: $(5 \times 1,000) + (3 \times 100) + (6 \times 10) + (7 \times 1)$

Word Form: Five thousand, three hundred sixty-seven

Standard (numerical) Form: 400,012,508

Expanded Form: $(4 \times 100,000,000) + (1 \times 10,000) + (2 \times 1,000) + (5 \times 100) + (8 \times 1)$

Word Form: Four hundred million, twelve thousand, five hundred eight

Note:

A comma “,” is used separate the different groups in the number.

The zero “0” is used as a place holder.

The word “and” is not used in writing the name of this type of number.

TRY:

Complete the following.

Standard Form	
Expanded form	$(6 \times 10,000) + (2 \times 1,000) + (4 \times 100) + (3 \times 10) + (7 \times 1)$
Word form	

Standard form	
Expanded form	
Word form	Three million, four hundred fifteen