

Converting Between Number Forms

Standard Notation → Word Name

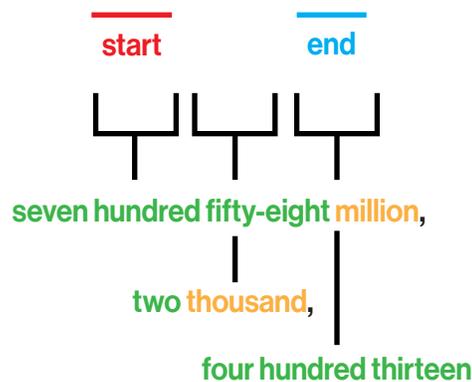
1. Begin by identifying the periods within the number.

Number: 758,002,413

Place Value Chart														
trillions			billions			millions			thousands			ones		
						7	5	8	0	0	2	4	1	3
hundreds	tens	ones	hundreds	tens	ones	hundreds	tens	ones	hundreds	tens	ones	hundreds	tens	ones

2. Starting from the leftmost period, write the **three-digit group name** followed by the **period name** except for the ones period. Commas separate each period.

Number: 758,002,413



seven hundred fifty-eight million, two thousand, four hundred thirteen

***Note:** All digits except 0 in the hundreds place values are followed by the word **hundred** in word form.

Example: 702,810,000 seven **hundred** two million, eight **hundred** ten thousand

****Note:** The tens and ones place values give a combined name. Numbers 1 through 20 are **single words**. Numbers 21 through 99 are **hyphenated** except for numbers with zero in the ones place value, which are **single words**.

Example: 219 two hundred **nineteen**
 272 two hundred **seventy-two**
 290 two hundred **ninety**

*****Note:** Periods containing **000** are omitted from the word name.

Example: 14,**000**,002 fourteen million, two

Converting Between Number Forms

Expanded Notation → Standard Notation

1. Convert the number from **reduced expanded notation** to **expanded notation**.

reduced expanded notation
7 ten millions + 2 millions + 5 hundred thousands + 2 tens



7 ten millions + 2 millions + 5 hundred thousands + 0 ten thousands + 0 thousands + 0 hundreds + 2 tens + 0 ones
expanded notation

2. Identify each of the **periods** in the expanded notation.

7 ten millions + 2 millions + 5 hundred thousands + 0 ten thousands + 0 thousands + 0 hundreds + 2 tens + 0 ones



millions

thousands

ones

3. Recombine from expanded notation to standard notation, starting from the leftmost digit.
Commas separate each period.

7 ten millions + 2 millions + 5 hundred thousands + 0 ten thousands + 0 thousands + 0 hundreds + 2 tens + 0 ones

start

end



millions

thousands

ones



72,500,020

start

end

Converting Between Number Forms

Word Name → Standard Notation

1.

Identify each of the **periods** in the word form.

twelve trillion, four hundred eighty

trillions	ones

2.

Identify each of the **digits** in the word form.

twelve trillion, four hundred eighty

trillions	ones
12	480

3. Recombine from word form to standard notation, starting from the leftmost digit. Remember, periods containing 000 may be omitted, but must be accounted for in standard notation.

Commas separate each period.

twelve trillion, four hundred eighty

trillions	ones
12	480
start	end

12,000,000,000,480

start				end
billions	millions	thousands		

Converting Between Number Forms

Expanded Notation → Word Form

1. Convert the number from **reduced expanded notation** to **expanded notation**.

reduced expanded notation

4 hundred millions + 2 millions + 2 hundreds



4 hundred millions + 0 ten millions + 2 millions + 0 hundred thousands + 0 ten thousands + 0 thousands + 2 hundreds + 0 tens + 0 ones

expanded notation

2. Identify each of the **periods** in the expanded notation.

4 hundred millions + 0 ten millions + 2 millions + 0 hundred thousands + 0 ten thousands + 0 thousands + 2 hundreds + 0 tens + 0 ones



millions

thousands

ones

3. Recombine from expanded notation to word form, starting from the leftmost period.

Omit any periods that contain 000 from the word name.

Commas separate each period.

4 hundred millions + 0 ten millions + 2 millions + 0 hundred thousands + 0 ten thousands + 0 thousands + 2 hundreds + 0 tens + 0 ones



millions

thousands

ones

start

end

four hundred two million,

two hundred

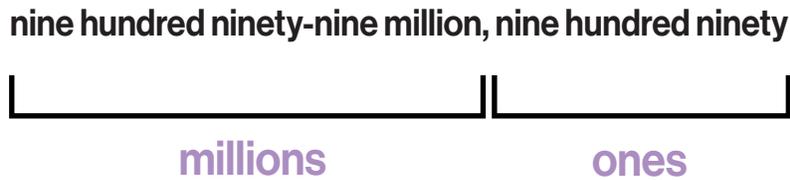
four hundred two million, two hundred

Converting Between Number Forms

Word Name → Expanded Notation

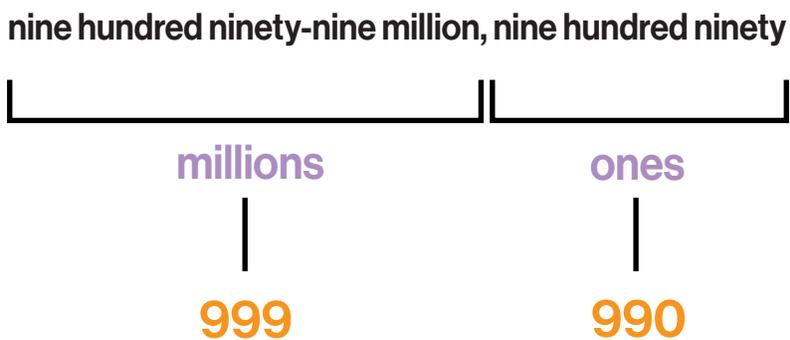
1.

Identify each of the **periods** in the word form.



2.

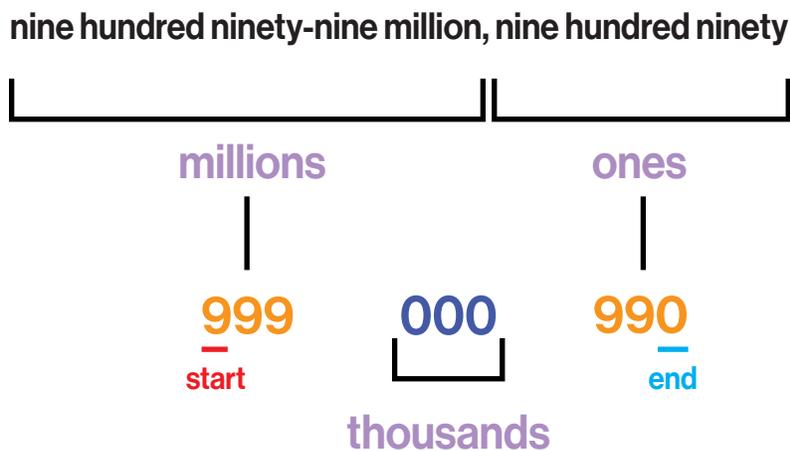
Identify each of the **digits** in the word form.



3.

Recombine from word form to expanded notation, starting from the leftmost digit. Remember, periods containing 000 may be omitted, but must be accounted for in expanded notation.

Plus signs “+” separate each period.



9 hundred millions + 9 ten millions + 9 millions + 0 hundred thousands + 0 ten thousands + 0 thousands + 9 hundreds + 9 tens + 0 ones

Converting Between Number Forms

Word Name \longrightarrow Expanded Notation

4.

Change from expanded notation to reduced expanded notation.

expanded notation

9 hundred millions + 9 ten millions + 9 millions + 0 hundred thousands + 0 ten thousands + 0 thousands + 9 hundreds + 9 tens + 0 ones



9 hundred millions + 9 ten millions + 9 millions + ~~0 hundred thousands + 0 ten thousands + 0 thousands~~ + 9 hundreds + 9 tens + ~~0 ones~~



9 hundred millions + 9 ten millions + 9 millions + 9 hundreds + 9 tens

reduced expanded notation