

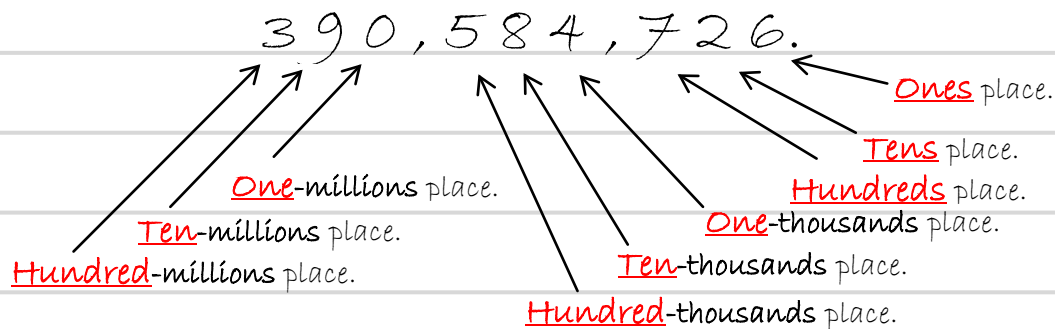
Place value

Objective 1

Determine the place value of a digit in a number.

The position of a digit in a number determines its place value.

Example 1: Find a pattern for place value in a whole number.



Answer the following homework questions using the whole number given in Example 1.

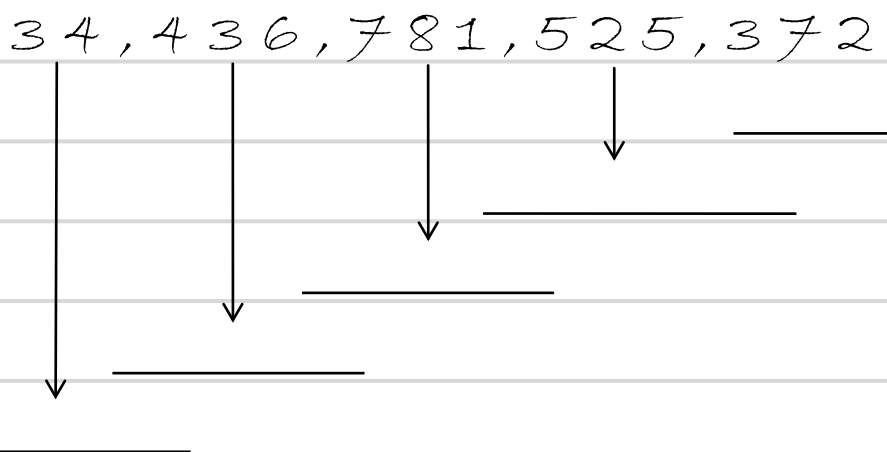
- 1) What pattern occurs with place values?
- 2) How are the commas being used?
- 3) What is the place value of the 9?
- 4) The 4 is in which thousands place?
- 5) The digit to the left of the decimal is which place value?
- 6) How many digits are always placed between two commas?

Objective 2

Learn how to say and write numbers using digits.

Note: Each group of three digits in a number is called a period.

Example 2: Define each period in the number below.



Example 3: Write each of the following word statements as a number using digits.

a) Four thousand, three hundred twelve.

b) Eighty seven thousand, one hundred forty-one.

c) Seven hundred fifty three thousand, five hundred ninety-eight.

Example 4: Write each of the following numbers as a word statement.

a) 3,501

b) 43,862

c) 704,016

Objective 3 Learn how to write numbers in expanded form.

Understanding place value allows us to represent a large number as a simple addition problem. Seeing numbers in this form is a good way to develop good addition techniques!

Example 5: Write each of the following numbers in expanded form.

a) 856

b) 1,397

c) 23,512

d) 105,408

Example 6: Calculate the number written in expanded form by performing each addition problem.

a) $500 + 80 + 7 =$

b) $2,000 + 300 + 50 + 9 =$

c) $40,000 + 2,000 + 40 + 1 =$

d) $200,000 + 7,000 + 600 =$

Answer the following homework questions.

7) Write the following word statement as a number using digits; Two thousand, seven hundred thirty-eight.

8) Write the following number as a word statement; 406,348.

9) Write the number 315,006 in expanded form.

10) What number is equal to $70,000 + 5,000 + 80 + 3$?