

Expanded Form – The I-Ready Way

The number stays the same. The way we describe it can change.

Same number.
Different forms.
Bigger thinking!

1 What is each digit worth?

Each digit has a value based on its place.

462,315

Digit	Place	Value
4	hundred thousands	400,000
6	ten thousands	60,000
2	thousands	2,000
3	hundreds	300
1	tens	10
5	ones	5

Try it!

1. In **583,247**, what is the value of the 8?

2. In **704,639**, what is the value of the 6?

2 Write the standard expanded form

Write each digit by its value.

462,315 =

$$400,000 + 60,000 + 2,000 + 300 + 10 + 5$$

Try it!

Write the standard expanded form for each number. (Only non-zero parts.)

a) **583,247 =**

$$\underline{\hspace{1cm}} + \underline{\hspace{1cm}} + \underline{\hspace{1cm}} + \underline{\hspace{1cm}}$$

b) **706,389 =**

$$\underline{\hspace{1cm}} + \underline{\hspace{1cm}} + \underline{\hspace{1cm}} + \underline{\hspace{1cm}}$$

c) **120,045 =**

$$\underline{\hspace{1cm}} + \underline{\hspace{1cm}} + \underline{\hspace{1cm}} + \underline{\hspace{1cm}}$$

3 Use place-value units

We can describe each value using place-value units.

400,000 = **4 hundred thousands**

60,000 = **6 ten thousands**

2,000 = **2 thousands**

300 = **3 hundreds**

10 = **1 ten**

5 = **5 ones**

Try it!

How many place-value units?

a) 700,000 = _____ hundred thousands

b) 90,000 = _____ ten thousands

c) 8,000 = _____ thousands

d) 400 = _____ hundreds

e) 70 = _____ tens

f) 6 = _____ ones

4 Trade the units

We can trade 1 larger unit for 10 of the next smaller unit.

1 larger unit = 10 smaller units

1 hundred thousand = 10 ten thousands

So, 4 hundred thousands = 40 ten thousands.

Now add the other 6 ten thousands:

40 ten thousands + 6 ten thousands = 46 ten thousands

4 hundred thousands + 6 ten thousands = 46 ten thousands

Try it!

Complete the equivalent forms.

a) 5 hundred thousands + 8 ten thousands = _____ ten thousands

b) 3 hundred thousands + 4 ten thousands = _____ ten thousands

c) 7 hundred thousands + 2 ten thousands = _____ ten thousands

5 Same number, different form

Both of these expressions represent the same number.

A

4 hundred thousands
+ 6 ten thousands
+ 2 thousands
+ 3 hundreds
+ 1 ten
+ 5 ones

B

46 ten thousands
+ 2 thousands
+ 3 hundreds
+ 1 ten
+ 5 ones

Think about it!

1. Why are A and B both correct?

2. What do we notice about the first two parts of each expression?

6 Find the missing number

Fill in the missing number so that the expression is equal to the given number.

a) **462,315 =** _____ ten thousands
+ 2 thousands
+ 3 hundreds
+ 1 ten
+ 5 ones

b) **583,247 =** _____ ten thousands
+ 3 thousands
+ 2 hundreds
+ 4 tens
+ 7 ones

c) **706,389 =** _____ ten thousands
+ 6 thousands
+ 3 hundreds
+ 8 tens
+ 9 ones

7 The I-Ready Way

Which expression represents **583,247**? Choose one answer. Only one is correct.

- ☐ A. 58 ten thousands + 3 thousands + 2 hundreds + 4 tens + 7 ones
- ☐ B. 5 ten thousands + 83 thousands + 2 hundreds + 4 tens + 7 ones
- ☐ C. 583 ten thousands + 2 hundreds + 4 tens + 7 ones
- ☐ D. 58 thousands + 3 hundreds + 2 tens + 4 ones

Explain how you know:

**The number stays the same.
The way we describe it can change.**

Stronger place value.
Stronger mathematicians.