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** =

_____ + _____ + _____ + _____ + _____ + _____

b) **706,389** =

_____ + _____ + _____ + _____ + _____ + _____

c) **120,045** =

_____ + _____ + _____ + _____

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.