

# Numbers in Expanded Form



## Numbers in expanded form

Representing the number as a sum of the place values of each digit in a number in the expanded form of a number.

For example:

Expanded form of 1563

$$\begin{aligned} 1563 &= 1 \text{ Thousand} \quad 5 \text{ hundreds} \quad 6 \text{ tens} \quad 3 \text{ ones} \\ &= 1000 + 500 + 60 + 3 \end{aligned}$$

Expanded form of 1563

$$1000 + 500 + 60 + 3$$

## Example 1:

Expanded form of 8506

Solution:

8506 = 8 Thousands 5 hundreds 0 ten 6 ones

= 8000 + 500 + 0 + 6

= 8000 + 500 + 6

Expanded form of 8506

8000 + 500 + 6

## Example 2:

### Expanded form of 7623

#### Solution:

Thousands	Hundreds	Tens	Ones
TH	H	T	O
7 X 1000	6 X 100	2 X 10	3 X 1
7000	600	20	3

### Expanded form of 7623

$$7000 + 600 + 20 + 3$$

## Example 3:

### Expanded form of 3890

#### Solution:

Thousands	Hundreds	Tens	Ones
TH	H	T	O
3 X 1000	8 X 100	9 X 10	0 X 1
3000	800	90	0

### Expanded form of 3890

$$3000 + 800 + 90$$

## Example 4:

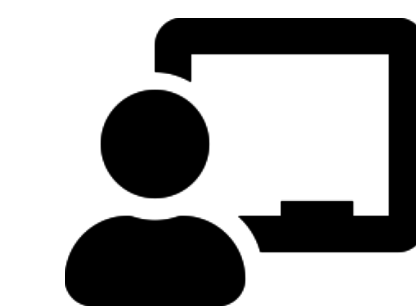
### Expanded form of 4018

#### Solution:

$$\begin{aligned} 4018 &= 4 \text{ Thousands} \quad 0 \text{ hundred} \quad 1 \text{ ten} \quad 8 \text{ ones} \\ &= 4 \times 1000 \quad + \quad 0 \times 100 \quad + \quad 1 \times 10 \quad + \quad 8 \times 1 \\ &= 4000 \quad + \quad 0 \quad + \quad 10 \quad + \quad 8 \end{aligned}$$

### Expanded form of 4018

$$4000 \quad + \quad 10 \quad + \quad 8$$



## Example 5:

Expanded form of 5934

Solution:

$$\begin{aligned} 5934 &= 5 \text{ Thousands} \quad 9 \text{ hundreds} \quad 3 \text{ tens} \quad 4 \text{ ones} \\ &= 5 \times 1000 \quad + \quad 9 \times 100 \quad + \quad 3 \times 10 \quad + \quad 4 \times 1 \\ &= 5000 \quad + \quad 900 \quad + \quad 30 \quad + \quad 4 \end{aligned}$$

Expanded form of 5934

$$5000 \quad + \quad 900 \quad + \quad 30 \quad + \quad 4$$

