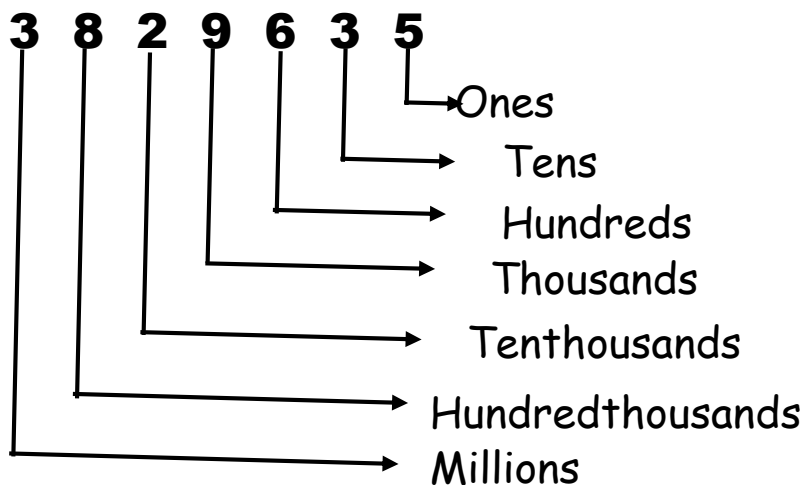


## TOPIC: WHOLE NUMBERS

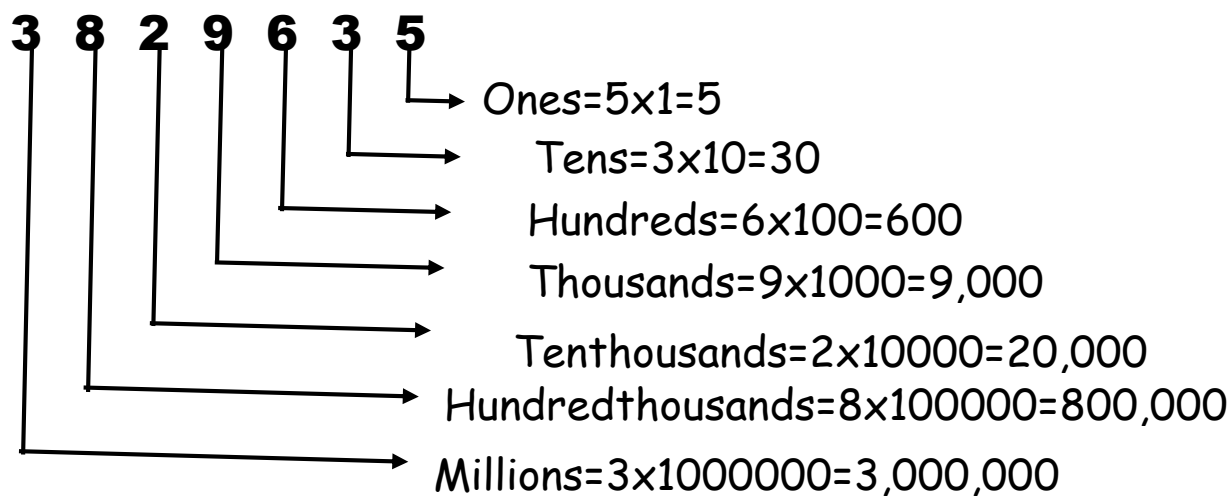
### CONTENT: Finding place values and values

#### Examples

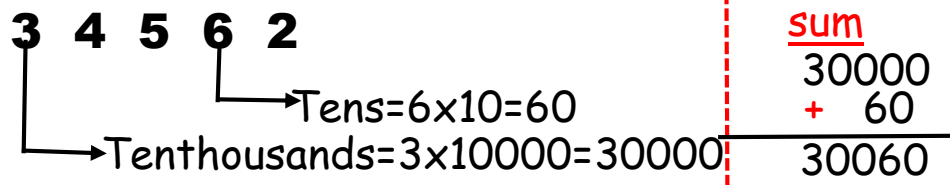
Identify the place value of each digit in the number below



Find the value of each digit in the number below



Find the sum of the values of 3 and 6 in the number 34562



sum
30000
+ 60
30060

Find the product of the values of 4 and 6 in the number 4062

4 0 6 2

→ Tens =  $6 \times 10 = 60$   
→ Thousands =  $4 \times 10000 = 40000$

Product

=  $40000 \times 60$   
= 2400000

Find the product of the value of 8 and the place value of 3 in the number 53862

5 3 8 6 2

→ Hundreds =  $8 \times 100 = 800$   
→ Thousands = 1000

Product

=  $800 \times 1000$   
= 800000

### ACTIVITY

1. Find the place value of each of the digits with a ring in the following numbers.

a) 4 7 6 5

b) 5 6 9 3 8

c) 4 0 6 5 7

2. Find the value of each of the digits with a ring in the following numbers.

a) 3 7 4

b) 4 2 5 8 9

c) 4 6 9 5 9 4

3. Find the sum of the values of 4 and 6 in the number 63478.

4. Workout the product of the values of 3 and 5 in the number 3765.

6. Represent the following numbers on an abacus.

a) 4302

b) 3205

c) 2520

## TOPIC: WHOLE NUMBERS

CONTENT: Writing whole numbers in words and in figures

### Examples

Write the following numbers in words

a) 8 2 9 6 3 5

Thousands	Units
829	635

829,635= Eight hundred twenty nine thousand six hundred thirty five.

**b) 99035**

Million	Thousands	Units
	99	035

99,035=Ninety nine thousand thirty five.

**c) 40215**

Million	Thousands	Units
	40	215

40,215=Forty thousand two hundred fifteen.

2. Write the following in figures

a) Forty nine thousand fifteen.

$$\begin{array}{r} 49000 \\ +15 \\ \hline 49015 \end{array}$$

b) Ninety six thousand forty.

$$\begin{array}{r} 96000 \\ + 40 \\ \hline 96040 \end{array}$$

Million	Thousands	Units
	3	048

3048=Three thousand forty eight.

### ACTIVITY

1. Write the following numbers in words.

a) 4 7 6 5    b) 5 6 9 3 8    c) 40657    d) 55009

2. Write the following in figures.

a) Forty six thousand eighty five.

b) Seventy two thousand two hundred fifty thirteen.

c) Ninety hundred four thousand nineteen.

## **TOPIC: WHOLE NUMBERS**

### **CONTENT: Forming numbers using digits**

#### **Examples**

1. Given the digits 3,4,6 write down all the 3-digit numbers formed using the digits above.

=346,364,436,463,634,643

2. Given the digits 0,4,1 write down all the 3-digit numbers formed using the digits above.

=104,140,403,430

3. Given the digits 2,4,1 and 6

a) Write down the smallest 4-digit number that can be formed using the above digits.

=1246

b) Write down the largest 4-digit number that can be formed using the above digits.

=6421

4. Given the digits 2, 0, 4 and 1

a) Write down the smallest 4-digit number that can be formed using the above digits.

=1024

b) Write down the largest 4-digit number that can be formed using the above digits.

=4210

### Activity

1. Given the digits 5, 9 and 6 write down all the 3-digit numbers formed using the digits above.

2. Given the digits 0, 6 and 7 write down all the 3-digit numbers formed using the digits above.

3. Given the digits 9, 8, 1 and 2

a) Write down the smallest 4-digit number that can be formed using the above digits.

b) Write down the largest 4-digit number that can be formed using the above digits.

c) Find the sum of the smallest and the largest numbers formed.

4. Given the digits 3, 8, 0 and 2

a) Write down the smallest 4-digit number that can be formed using the above digits.

b) Write down the largest 4-digit number that can be formed using the above digits.

c) Find the sum of the smallest and the largest numbers formed.

## TOPIC: WHOLE NUMBERS

**CONTENT:** Writing whole numbers in expanded form using place values and values

### Examples

1. Expand the following using place values

a.) 9812

TH	H	T	O
9	8	1	2

$$9812 = (9 \times 1000) + (8 \times 100) + (1 \times 10) + (2 \times 1)$$

b) 23012

TT	TH	H	T	O
2	3	0	1	2

$$= (2 \times 10000) + (3 \times 100) + (0 \times 10) + (1 \times 10) + (2 \times 1)$$

2. Expand the following using values

a) 927

H	T	O
9	2	7

$$= (9 \times 100) + (2 \times 10) + (7 \times 1)$$

$$= 900 + 20 + 7$$

b) 4812

TH	H	T	O
4	8	1	2

$$= (4 \times 1000) + (8 \times 100) + (1 \times 10) + (2 \times 1)$$

$$= 4000 + 800 + 10 + 2$$

### Activity

1. Expand the following using place values.

a) 234

b) 3427

c) 7924

2. Expand the following using values.

a) 534

b) 7269

c) 68934

## TOPIC: WHOLE NUMBERS

**CONTENT:** Writing whole numbers in expanded form using powers of ten

### Examples

1 Expand the following using place values

a) 9812

$10^3$	$10^2$	$10^1$	$10^0$
9	8	1	2

$$9812 = (9 \times 10^3) + (8 \times 10^2) + (1 \times 10^1) + (2 \times 10^0)$$

b) 23512

$10^4$	$10^3$	$10^2$	$10^1$	$10^0$
2	3	5	1	2

$$= (2 \times 10^4) + (3 \times 10^3) + (5 \times 10^2) + (1 \times 10^1) + (2 \times 10^0)$$

a) 927

$10^2$	$10^1$	$10^0$
9	2	7

$$= (9 \times 10^2) + (2 \times 10^1) + (7 \times 10^0)$$

### Activity

1. Expand the following using powers of ten.

a) 234

b) 3427

c) 7924

c) 534

d) 7269

c) 68934

## TOPIC: WHOLE NUMBERS

### CONTENT: Rounding off whole numbers

#### Examples

1. Round 578 off to the nearest tens. b) 3 6 4

$$\begin{array}{r} 57\cancel{8} \\ +10 \\ \hline 580 \end{array}$$

$$\begin{array}{r} 36\cancel{4} \\ +00 \\ \hline 360 \end{array}$$

2. Round 5378 off to the nearest hundreds b) 3 6 3 8

$$\begin{array}{r} 53\cancel{7}8 \\ +100 \\ \hline 5400 \end{array}$$

$$\begin{array}{r} 36\cancel{3}8 \\ +000 \\ \hline 3600 \end{array}$$

3. Round 5378 off to the nearest thousands

$$\begin{array}{r} 25\cancel{3}78 \\ +1000 \\ \hline 26000 \end{array}$$

$$\begin{array}{r} b) 23\cancel{6}78 \\ +0000 \\ \hline 23000 \end{array}$$

#### Activity

1. Round off the following to the nearest tens

a) 234

b) 3427

c) 7929

2. Round off the following to the nearest hundreds.

a) 534

b) 7269

c) 68934

3. Round off the following to the nearest thousands.

a) 8421

b) 8269

c) 12934

4. Round off 236578 to the nearest ten thousands.



## TOPIC: **WHOLE NUMBERS**

**CONTENT:** Writing natural numbers in Roman Numerals

### Basics of Roman Numerals

1	5	10	50	100	500	1000
L	V	X	L	C	D	M

4 =IV	6=VI	9=IX	2=II	3=III
40 =XL	60=LX	90=XC	20=XX	30=XXX
400 =CD	600=DC	900=CM	200=CC	300=CCC
			2000=MM	3000=MMM

1.Convert 96 into Roman numerals

$$96 = 90 + 6$$

$$96 = \text{XCVI}$$

2.Convert LIX in Hindu Arabic numerals

$$\text{LIX} = 50 + 9$$

$$= 59$$

### Activity

1.Write the following numbers in Roman Numerals

a) 54      b) 49      c) 99      d) 955      e) 415

2.Write the following Roman Numerals into Hindu Arabic Numerals

a) LIX      b) XCIX      c) LXXXIV      d) MDCIV

3.Alex is XLIX years old. Express his years in Hindu Arabic numerals