

# Place value, rounding, negative numbers, Roman numerals

## Place value in numbers to 1 million

The position of the digit gives its value

Millions	Hundred thousands	Ten thousands	thousands	hundreds	tens	units
1	2	3	4	5	6	7

### Example

The **value** of the digit '1' is 1 000 000

The **value** of the digit '2' is 200 000

The **value** of the digit '3' is 30 000

The **value** of the digit '4' is 4000

**1,234,567** is written as one million, two hundred and thirty-four thousand, five hundred and sixty-seven.

## Round numbers to nearest 10, 100, 1000, 10000, 100000

**Example 1-** Round 342 679 to the nearest 10 000

- Step 1 - Find the 'round-off digit' - **4**
- Step 2 - Look one digit to the right of **4** - **2**

**5 or more?** NO - leave 'round off digit' unchanged  
- Replace following digits with zeros

**ANSWER - 340 000**

**Example 2-** Round **453** 679 to the nearest 100 000

- Step 1 - Find the 'round-off digit' - **4**
- Step 2 - **Look** one digit to the right - **5**

**5 or more?** YES - add one to 'round off digit'  
- Replace following digits with zeros

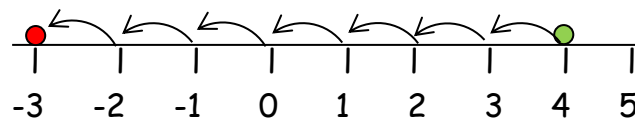
**ANSWER - 500 000**

## Negative numbers

A number line is very useful for negative numbers.

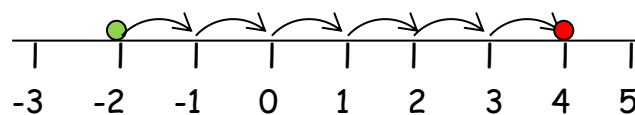
- The number line below shows:

$$4 - 7 = -3$$



- The number line below shows:

$$-2 + 6 = 4$$



## Roman Numerals

The seven main symbols



I = 1

V = 5

X = 10

L = 50

C = 100

D = 500

M = 1000

Other useful ones include:

IV = 4

IX = 9

XL = 40

XC = 90

I V X L C D M



1



10



100



1000

5

50

500

To work out the value of a Roman numeral:

- if a lower-value letter comes **after** a larger-value letter, it is added:

$$VI = V + I = 5 + 1 = 6$$

- if a lower-value letter comes **before** a larger-value letter, it is subtracted:

$$IX = X - I = 10 - 9 = 9$$