



Y6- Place Value

Place Value

We use place value grids to show the value of each digit within a number

M	100 th	10 th	Th	H	T	U	.	t	h
Millions	Hundreds of Thousands	Tens of Thousands	Thousands	Hundreds	Tens	Units	Decimal Point	Tenths	Hundredths
5	3	2	0	7	8	6	.	4	1

Value of digits

Millions			Thousands			Ones		
100s	10s	1s	100s	10s	1s	100s	10s	1s
1	2	3	4	5	6	7	8	9

123,456,789 =

One hundred and twenty-three million,
four hundred and fifty-six thousand,
seven hundred and eighty-nine

123,000,000 + 456,000 + 789

Comparing and Ordering numbers

When we put numbers in order, we need to compare the value of their digits...

Remember to START with the largest digits - they have the most value.

$$54,353 < 60,210$$

If the digits are the same, move down to the next

$$543,478 < 542,502$$

Remember to check the column value

$$99,782 < 323,251$$

Ascending: Smallest to largest

Descending: Largest to smallest

Roman numerals

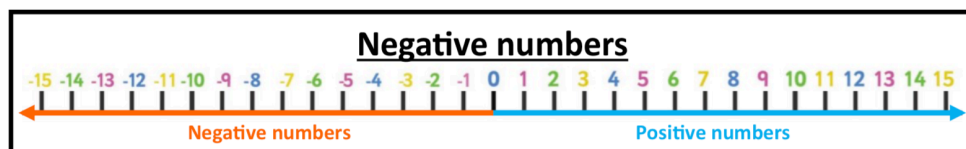
1 = I	40 = XL
2 = II	50 = L
3 = III	60 = LX
4 = IV	70 = LXX
5 = V	80 = LXXX
6 = VI	90 = XC
7 = VII	100 = C
8 = VIII	101 = CI
9 = IX	150 = CL
10 = X	200 = CC
20 = XX	500 = D
21 = XXI	800 = DCCC
30 = XXX	1000 = M

Negative Numbers

If you count backwards from zero you will reach negative numbers. We need negative numbers for temperature and money.

Positive numbers Any number that is more than zero, e.g. 1, 2, 3, 4, 5.

Negative numbers Any number that is less than zero. e.g. -1, -2, -3, -4, -5.



Rounding numbers

$$343,950 \xrightarrow{\text{Nearest 10,000}} 340,000$$

$$343,950 \xrightarrow{\text{Nearest 1,000}} 344,000$$

$$343,950 \xrightarrow{\text{Nearest 100}} 344,000$$

$$343,950 \xrightarrow{\text{Nearest 10}} 343,950$$

When rounding, don't forget that 5 or more rounds up, 4 or less rounds down.

If you are rounding to the nearest 1000, draw a box around the digit in the thousands column, underline the hundreds.

