

## 1

# Place value and negative numbers

## CAN YOU?

- Identify the place value of each digit in any number up to ten million.
- Round large numbers to any degree of accuracy.
- Use negative numbers and calculate intervals across zero.
- Solve number problems that involve all of the above.

## SKILLS CHECK

Digits of large numbers are grouped in threes, often with a comma separating the millions from the thousands and from the ones.

10,000,000	1,000,000	100,000	10,000	1000	100	10	1
	9	6	0	1	9	1	0
	↑	↑			↑		
	nine million	six hundred and one thousand			nine hundred and ten		

When rounding, look to the digit to the right of the one you are rounding to. If it is 5 or more, round up. If not, round down.

Negative numbers are on the other side of zero from positive numbers. When calculating across zero, remember to include it like any other number.

What is the **difference** between the values of the two **9** digits in 9,601,910?

*Write the values of both digits in full first. 9,000,000 and 900*

*Find the difference by subtracting or counting up from the smaller number.*

$$9,000,000 - 900 = 8,999,100$$

Round 9,601,910 to the nearest 1000, to the nearest 10,000 and to the nearest 1,000,000.

...to nearest 1000: 9,601,910 → rounds up to 9,602,000

...to nearest 10,000: 9,601,910 → rounds down to 9,600,000

...to nearest 1,000,000: 9,601,910 → rounds up to 10,000,000