

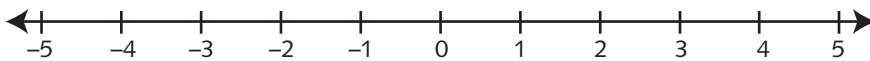
Negative Numbers

- Understand negative numbers
- Count forwards and backwards with positive and negative numbers
- Find the next terms in a sequence

What are Negative Numbers?

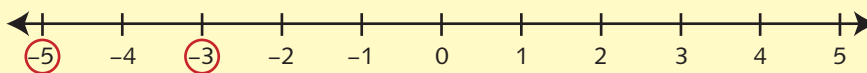
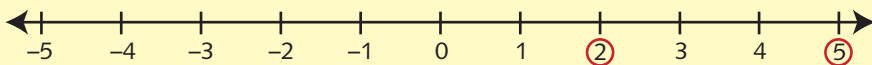
Numbers below zero are called **negative numbers**. They have a 'minus' sign in front of them to show that they are negative numbers, for example -14 , -465 .

If you look at a number line, you can see that negative numbers count from 0 in the opposite direction to **positive numbers**.



Example

5 is greater than 2.



So, -3 is GREATER than -5 .

SMALLER NUMBERS GREATER NUMBERS

Key Point

We know that positive numbers get greater (bigger) as we count in this direction.

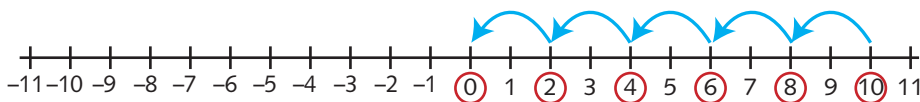
In the same way, negative numbers also get greater as you count in this direction.

Key Point

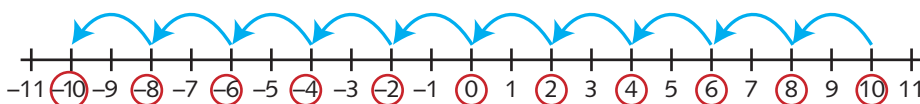
The nearer a negative number is to zero on a number line, the greater or bigger it is.

Counting Using Negative Numbers

You can count back from 10 in 2s by taking away 2 each time:



If you continue to count back in 2s, you can go beyond zero into negative numbers.



Counting Sequences

You can count on or back from any number in equal steps. This is called a **sequence**.

You need to be able to count on or back from any number in jumps of any size.

Example

Counting from 5 in steps of 4: 5, 9, 13, 17...

Count back in 100s from 953: 953, 853, 753...

Sometimes you are not given the steps.

Example

What are the next three **terms** or numbers in this sequence?

4, 10, 16, _____

First you need to work out the jump between each number in our sequence.

+6 +6
4 10 16

To jump from 4 to 10, you add 6.
To jump from 10 to 16, you add 6.

+6 +6 +6 +6 +6
4 10 16 22 28 34

You can find the next terms by adding 6 each time.

Tip

Always check your arithmetic carefully when counting on and back – it's easy to make mistakes!



Quick Test

- Order these numbers from smallest to largest:
10 -3 5 -9 6 -2 0 -5
- Fill in the next three terms counting back in 3s:
4 1 -2 _____
- Fill in the next three terms counting on in 50s:
-50 0 _____

Key Words

- Negative number
- Positive number
- Sequence
- Term