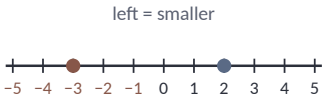
Negative numbers: fact sheet

Planner week 5 · Learn these facts

Number line



Numbers to the **left** are smaller

−3 is smaller than 2

Ordering

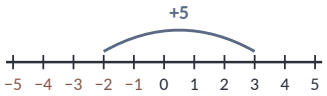
−7 −2 −1 0 7

smallest → biggest

−7 is **smaller** than −2

Bigger number after − = smaller

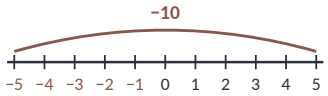
Adding



Adding: move **right**

−2 + 5 = 3

Subtracting



Subtracting: move **left**

5 − 10 = −5

Two signs together

3 − −2 = 3 + 2 = 5

3 + −2 = 3 − 2 = 1

Same signs: +. Different signs: −

− − becomes +

Multiply and divide

−3 × 4 = −12

−3 × −4 = 12

Same signs: answer +. Different: −

−12 ÷ −3 = 4

Halfway between

−2 and 8

(−2 + 8) ÷ 2 = 3

Add them and halve

Or count in from each end

Temperatures

Rise	add, move up
Fall	subtract, move down
Difference	count the gap: −5 to 3 is 8

Which sheet do I need?

Ordering negative numbers ▸
put in order, temperatures

Calculating with negative numbers ▸
+ − × ÷ with negatives

Key words

- **Negative** less than zero
- **Difference** the gap between two numbers
- **Ascending** smallest first
- **Integer** a whole number

Exam tips

- Draw a **number line** if you're not sure.
- −10 is smaller than −1.
- Count the difference across zero: −5 to 2 is 7.
- Check you have written **every** number when ordering.
- Temperature questions: write the temperature for each day as you go.
- − − is +.

Ordering negative numbers: fact sheet

Negative numbers · Planner week 5 · Learn the method

Worked example

QUESTION

Write these numbers in order of size. Start with the smallest number.

8 −4 1 −7 −2

ANSWER



−7, −4, −2, 1, 8

Read the numbers from left to right on the number line.

How to do it

1. Find the negative numbers: they are all smaller than 0.
2. The bigger the number after the minus sign, the **smaller** it is.
3. Then 0, then the positive numbers.
4. Write them out, smallest first.
5. Count them: have you used every number?

Model answer:

−7, −4, −2, 1, 8

Watch out

- Putting −2 before −7.
- Leaving out 0.
- Writing the list largest first.

Calculating with negative numbers: fact sheet

Negative numbers · Planner week 5 · Learn the method

Worked example

QUESTION

On Monday the temperature was 5°C. On Tuesday it was 10 degrees colder. On Wednesday it was 3 degrees warmer than Tuesday. Work out the temperature on Wednesday.

ANSWER

1. Tuesday: 5 − 10 = −5°C
2. Wednesday: −5 + 3 = −2°C

−2°C

Work out each temperature in turn.

How to do it

1. Adding: move **right** on the number line.
2. Subtracting: move **left**.
3. Difference: count the gap between the two numbers.
4. Multiplying or dividing: same signs → positive, different signs → negative.
5. Halfway: add the two numbers and divide by 2.

Model answer:

5 − 10 + 3 = −2°C

Watch out

- −15 + 42 = −57 (it is 27).
- Counting the difference as 3 instead of 7.
- −3 × −4 = −12 (it is +12).