



Writing up a calculation

Five steps so you lose neither the formula, nor the units, nor the meaning.



1 The 5C method

1 I Check



- Read the whole question.
- Circle the quantity to be found.
- Underline the data given.
- Note the symbol of each quantity.

2 I Clarify



- Write down what I am looking for.
- State the unit that is asked for.

3 I Collect



- Write the formula in symbols.
- Write the data with their symbols and units.

4 I Convert



- Check that the units are compatible.
- Spot the quantity that must be converted.
- Write the conversion if it is needed.

5 I Calculate



- Substitute the values, units included.
- Underline the result with its unit.
- Finish with a full sentence.

Duration is written t. Some textbooks write Δt : it is the same thing.

2 A worked example

Calculating a speed

1 Question

William goes to school, 3 km from his home. On his waveboard, the journey takes 30 min. What is his average speed in km/h?

2 I clarify

I am looking for the average speed s , in km/h.

3 I collect

$$s = d / t$$

$$d = 3 \text{ km}$$

$$t = 30 \text{ min}$$

4 I convert

The time must be in hours:
 $30 \text{ min} = 0.5 \text{ h}$

5 I calculate

$$s = d / t$$

$$s = 3 \text{ km} / 0.5 \text{ h}$$

$$\underline{s = 6 \text{ km/h}}$$

★ William's average speed is 6 km/h.

Common mistakes



- ✗ Skipping the formula in symbols.
- ✗ Forgetting the conversion.
- ✗ Writing the result without its unit.
- ✗ Not finishing with a sentence.



Check before handing it in

- ✓ The formula in symbols is written
- ✓ The conversions are done
- ✓ The result has its unit
- ✓ There is a concluding sentence

