Spreadsheet reference

Anatomy

B4 — column B, row 4.

B2:B10 — a range: ten cells, one instruction.

Operators: `+ − * / ^`, brackets first.

The $ rule

`B1` moves when you copy.

`$B$1` does not.

Use $ for a rate, a target, a constant.

Six functions

```
=SUM(B2:B10)
=AVERAGE(B2:B10)
=MIN(B2:B10) · =MAX(B2:B10)
=COUNT(B2:B10)
=IF(D2>=50,"PASS","FAIL")
```

Choose the chart, then build it

- Compare categories → **bar**
- Change over time → **line**
- Parts of a whole → **pie**, only if few slices

A chart that hides the pattern is decoration.