# Fictional measurement study

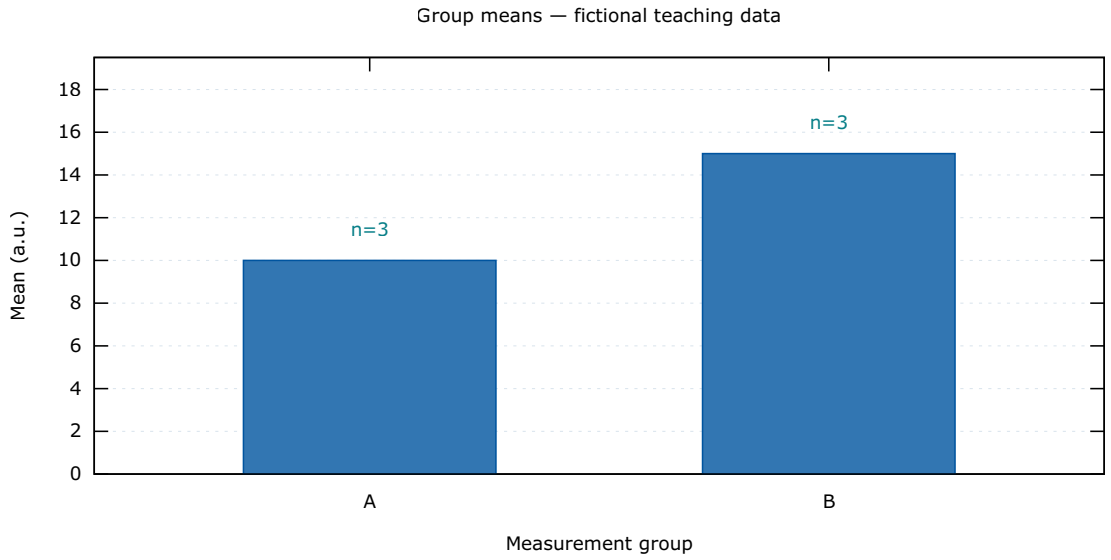
**Explain the program. Rebuild the result.**

## Question and decision

What is the mean of each group's usable measurements, in arbitrary units? These are fictional teaching data, not observations supporting a scientific claim. A recorded zero is usable. NA is missing. Invalid status takes precedence over missingness. No usable observations means NA, never an invented zero mean.

## Results

| group | n_total | n_used | n_missing | n_rejected | mean |
|---|---|---|---|---|---|
| A | 5 | 3 | 1 | 1 | 10.00 |
| B | 5 | 3 | 1 | 1 | 15.00 |




The n labels count used measurements. A group without usable values has no bar and is explicitly labeled n=0; mean=NA. Exclusion categories do not overlap.

## Evidence and handover

ROOT the tools. SHAPE the workflow. The reference and edge cases passed: 17 native checks. Data conservation is checked for every group: n_total = n_used + n_missing + n_rejected. The source revision is c1ccc8f2af94130907df580638cbe4660bed836b; its recorded dirty status is True.

- Read the complete literate source
- Read the original TSV input
- Download the summary TSV
- Inspect the machine-readable provenance
- Reuse input validation
- Reuse the group statistic program

The manifest hashes inputs, source, generated programs and checked scientific results. It does not hash itself or this report: manifest precedes report. Identical scientific tables are tested in this recorded environment. PDF bytes can differ with fonts, tool versions and timestamps; no cross-platform byte identity is claimed. Source, raw TSV and manifest are attached to the PDF.