Calibrating a flow law and constructing a classifier — review sheet

Use this after attempting the worked examples and practice. Explain each claim in words before calculating.

Key ideas

- Calibration estimates a model parameter; classification predicts a label.
- Parameter and error units matter.
- Freeze training choices before held-out evaluation.
- Directional error counts add information beyond overall accuracy.

Common errors and repairs

A small training error validates the mechanism. It only shows fit to those observations; test new predictions and missing mechanisms.

Compute normalization from all rows. Estimate it on training rows and reuse the same values on held-out rows.

Retrieve without your notes

- What does G=.05 L/(min mmHg) predict at a 20 mmHg difference?
- Can all-zero pressure differences identify G?
- What does a confusion-table row count?

Readiness check

- Fit and interpret one conductance parameter with units.
- Distinguish a numerical flow prediction from a categorical prediction.
- Separate training examples from held-out cases before fitting.
- Calculate and interpret an error summary and a confusion count.