

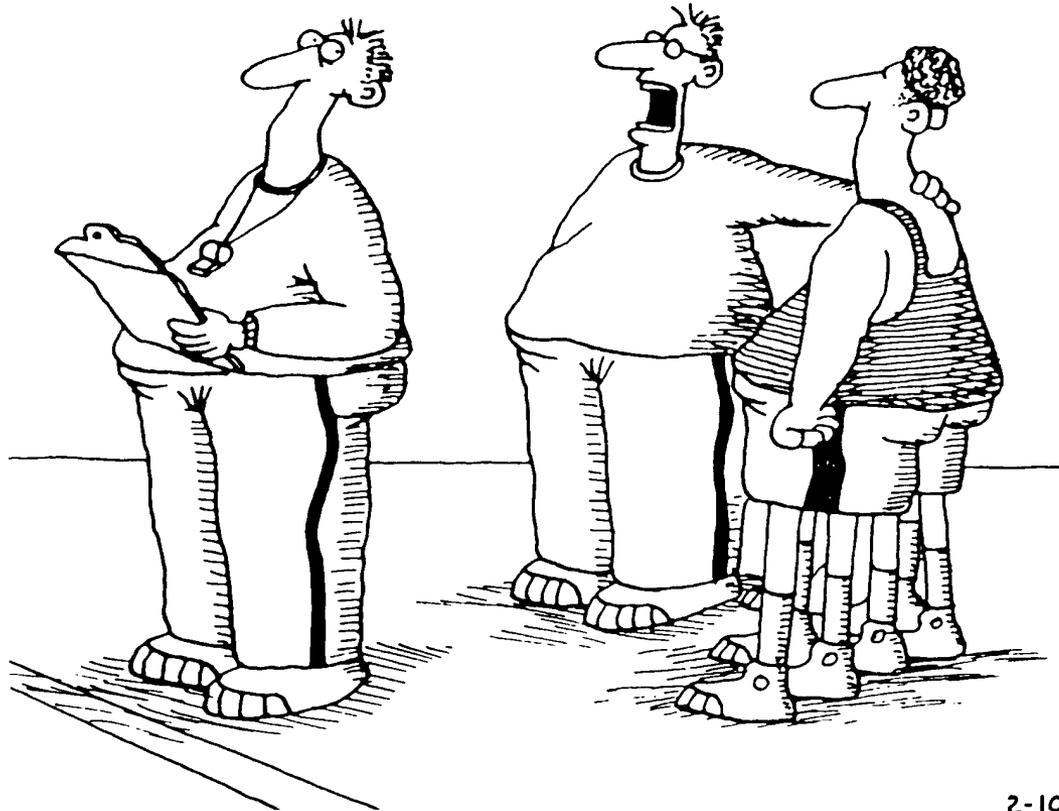
What Is an Operational Definition?

A definition that gives communicable meaning to a concept by specifying how the concept is measured and applied within a particular set of circumstances.

(Deming, 1986)

MPRE

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“Our troubles are over, coach. I found us a
7-footer ...”

Elements of an Operational Definition

- ***Criterion:*** Standard against which to evaluate results of the test
- ***Test:*** Procedure for measuring a characteristic
- ***Decision:*** Determination whether test results show the characteristic meets the criterion

Developing an Operational Definition

We want a 50% wool blanket.



- **Criteria** - Wool fibers evenly distributed & comprise half the blanket's weight.
- **Test** - Analysis of samples measures distribution & proportion of fibers.
- **Decision** - Wool fibers evenly distributed & comprise half the weight. Blanket is 50% wool.

Worksheet
Operationally define the term:

Criterion:

Test:

Decision:

Exercise 1 - Possible Answer

Operationally define the term

Rust-free

Criterion: The absence of any visible oxidation on the surface of the metal

Test: Under good lighting conditions, a person with 20/20 vision examines the surface of the metal for evidence of oxidation.

Decision: If no oxidation is observed, the criterion is met. The surface is *rust-free*.

Exercise 2 - Possible Answer

Operationally define the term *Fast (pharmacy service)*

Criterion: Medication is dispensed at the customer service window no more than 10 minutes after the prescription is turned in at the pharmacy.

Test: The time to fill a prescription is determined using a calibrated stopwatch.

Decision: If the medication is dispensed no more than 10 minutes after receipt of the prescription, the criterion is met. Pharmacy service is *fast*.

Exercise 3a - Possible Answer

Operationally define the term

Satisfactory (oil lubrication)

Criterion: Evidence of oil in the bearing's sight flow indicator

Test: Under good lighting conditions, oil flow is observed with the naked eye in the sight flow indicator.

Decision: If oil flow is observed, the criterion is met. Oil lubrication is *satisfactory*.

Exercise 3b - Possible Answer

Operationally define the term

Satisfactory (oil lubrication)

Criterion: Minimum of 15 PSIG of lube oil pressure at the most remote bearing

Test: An observer checks the oil gage pressure at the most remote bearing.

Decision: If the oil gage pressure is at least 15 PSIG, the criterion is met. Oil lubrication is *satisfactory*.