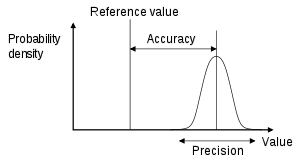
**Accuracy:**

it is a description of *systematic errors*. In the fields of science and engineering, the accuracy of a measurement system is the degree of closeness of measurements of a quantity to that quantity's true [value](https://en.wikipedia.org/wiki/Value_(mathematics))

In simplest terms, given a set of data points from repeated measurements of the same quantity, the set can be said to be *precise* if the values are close to each other, while the set can be said to be *accurate* if their average is close to the *true value* of the quantity being measured. In the first, more common definition above, the two concepts are independent of each other, so a particular set of data can be said to be either accurate, or precise, or both, or neither.

[[](https://en.wikipedia.org/wiki/File:Accuracy_and_precision.svg)](https://en.wikipedia.org/wiki/File:Accuracy_and_precision.svg)

Accuracy is the proximity of measurement results to the true value; precision, the repeatability, or reproducibility of the measurement

*Accuracy* is also used as a statistical measure of how well a binary classification test correctly identifies or excludes a condition. That is, the accuracy is the proportion of true results (both true positives and true negatives) among the total number of cases examined.[[7]](https://en.wikipedia.org/wiki/Accuracy_and_precision#cite_note-7) To make the context clear by the semantics, it is often referred to as the "Rand accuracy" or "Rand index".[[8]](https://en.wikipedia.org/wiki/Accuracy_and_precision#cite_note-8)[[9]](https://en.wikipedia.org/wiki/Accuracy_and_precision#cite_note-9)[[10]](https://en.wikipedia.org/wiki/Accuracy_and_precision#cite_note-10) It is a parameter of the test. The formula for quantifying binary accuracy is:

Accuracy for the matrix can be calculated by taking average of the values lying across the**“main diagonal”.**

⇒Accuracy = (TP+TN)/(TP+TN+FP+FN)

where: TP = True positive; FP = False positive; TN = True negative; FN = False negative