Mathematics

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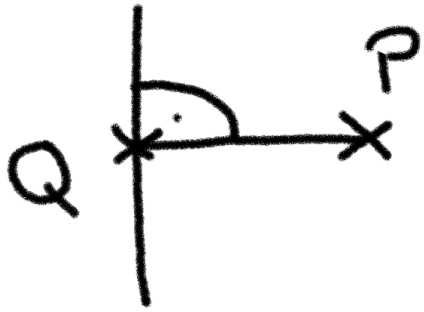
Gaussian elimination

Vector

Distance between 2 points



To get the distance between the points they need to be parallel and reachable with a 90° angle.

As seen with the Point P and the Point on this straight line. The distance with the right angle must be the shortest distance from the Point to the other Point.

Step by step how to calculate the distance between two points with an example:

g:$\vec{x} = \vec{a} + \vec{t}$; t ∈ ℝ

1.) Set Point Q on the line g in relation of t

Element

∈ means something is an element of a number set.

For example T ∈ ℝ means that T can be replaced by any real number (-2, 0, 2.4, 1/3, π, …)

Number Sets

Symbol	Name	Includes
ℕ	Natural Numbers	0, 1, 2, 3, 4, 5, …
ℤ	Integers	-3, -2, -1, 0, 1, 2, 3, …
ℚ	Rational Numbers	-2/5, 0.54, 1/5, 13/4, …
ℝ	Real Numbers	-2, 0, 2.4, 1/3, π, …
ℂ	Complex Numbers	Ask someone who understands

Each of the them is a subset of the next one. A rational number is also a real number.

$\subset$ is the symbol for subset.

$\mathbb{N} \subset \mathbb{Z} \subset \mathbb{Q} \subset \mathbb{R} \subset \mathbb{C}$