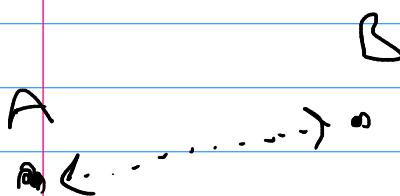


Vergleichen?

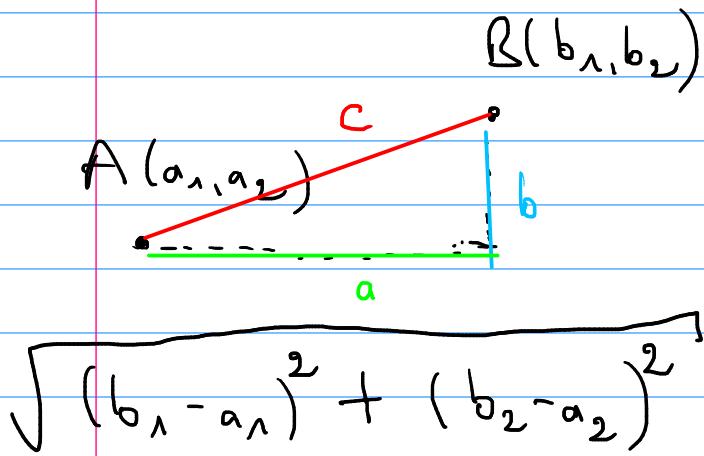
→ Darstellung?

Distanz (maß)



euklidische Distanz

Ähnlichkeit (maß)



$$a^2 + b^2 = c^2$$

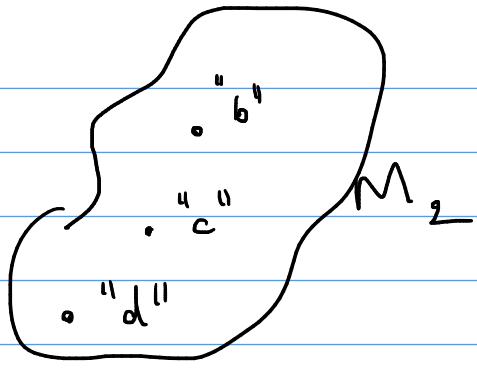
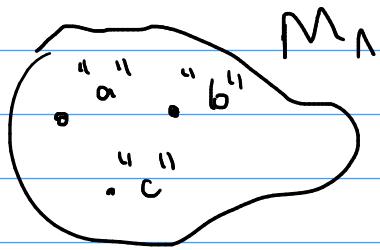
$$\Rightarrow c = \sqrt{a^2 + b^2}$$

- HUND $\text{dist}(\text{HUND}, \text{HAND}) = 1$
 $\begin{array}{c|c|c} | & \times & | \\ \text{H} & \text{A} & \text{N} \\ \text{U} & \text{D} & \text{D} \end{array}$ \hookrightarrow Hamming - Distanz

- ORT
 $\begin{array}{c} \text{O} \\ \curvearrowright \\ \text{R} \\ \curvearrowright \\ \text{T} \end{array}$ $\text{dist}(\text{ORT}, \text{ROT}) = 1$
 $\begin{array}{c} \text{O} \\ \text{R} \\ \curvearrowright \\ \text{T} \\ \text{O} \\ \text{R} \end{array}$ $\text{dist}(\text{ORT}, \text{TOR}) = 2$
 \hookrightarrow Jaro - Distanz

- PFERD
 $\begin{array}{c} \text{P} \\ \text{F} \\ \text{E} \\ \text{R} \\ \text{D} \end{array}$ $\text{dist}(\text{PFERD}, \text{PFADE}) = 3$
 $\begin{array}{c} \text{P} \\ \text{F} \\ \text{A} \\ \text{D} \\ \text{E} \end{array}$ \hookrightarrow Levenshtein - Dist.

"Ähnlichkeit"



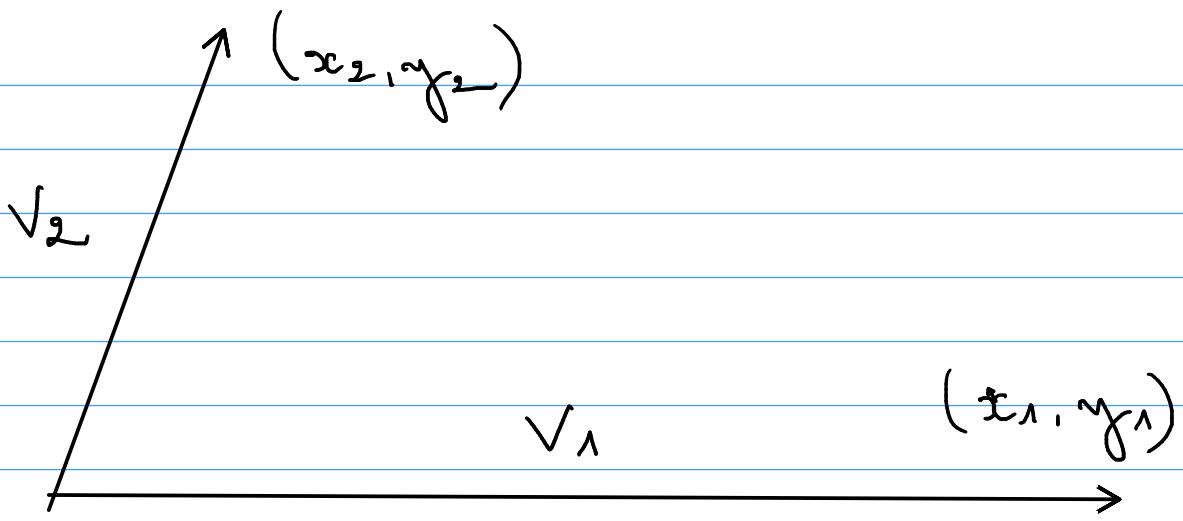
$$\frac{\text{gemeinsame Elemente}}{\text{Anzahl aller ETC}} = \frac{2}{4} = 0.5$$

BROT

$$\text{sim}(\text{BROT}, \text{ROT}) = 3$$

ROT

↳ Longest - Common - Subseq



Skalarprodukt:

$$v_1 \cdot v_2 = x_1 \cdot x_2 + y_1 \cdot y_2 (+ z_1 \cdot z_2)$$

$$\langle v_1, v_2 \rangle$$

$$\text{np.} \bot (v_1, v_2)$$



$$0^\circ \rightsquigarrow \sin = 1$$

A horizontal line with arrows at both ends. A vertical line segment connects the origin to the right end of the line, forming a 90-degree angle.

$$180^\circ \rightsquigarrow \sin = -1$$

A horizontal line with arrows at both ends. A vertical line segment connects the origin to the left end of the line, forming a 270-degree angle.

$$\frac{\sqrt{v_1} \cdot \sqrt{v_2}}{\|v_1\| \|v_2\|} = \cos(\theta)$$

A diagram showing a horizontal line with a wavy top. Two points on the line are connected by a diagonal line segment, forming a right-angled triangle. The angle between the horizontal line and the diagonal segment is labeled theta.

