

<b>4. Distances</b>
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done. will write up in the evening

For  $\delta(x, y)$  to be a metric, we have to show:

1.  $\delta(x, y) \geq 0, \delta(x, y) = 0$  iff  $x = y$
2.  $\delta(x, y) = \delta(y, x)$
3.  $\delta(x, y) \leq \delta(x, z) + \delta(z, y)$

(i) done

(ii) dfdf

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