

Relations

Transitive Relations

[Youtube.com/StatsLabDublin](https://www.youtube.com/StatsLabDublin)

kobriendublin.wordpress.com

Transitive Relations

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- A relation R is said to be ***transitive*** if xRy and yRz then xRz .

Transitive Relations

A, B and C live in a row of three houses

- A and B are next door neighbours.
- B and C are also next door neighbours.

Transitive Relations

Digraph

Transitive Relations

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- A and B are next door neighbours.
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A and C are not next door neighbour, so this relation is not transitive.

Transitive Relations

Suppose we looked at the relation “**is a neighbour of**” rather than “**is a next-door neighbour of**” .

Transitive Relations

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Transitive Relations

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