

PRÁCTICA 1 - TALF

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Activities

1. Find the power set R^3 of $R = (1, 1), (1, 2), (2, 3), (3, 4)$. Check your answer with the script `powerrelation.m` and write a LATEX document with the solution step by step.

Calculamos $R^2 = R \circ R$ y luego $R^3 = R^2 \circ R$:

Para ello, utilizamos la propiedad que dice:

$$(a, b) \in R \wedge (b, c) \in R \rightarrow (a, c) \in R$$

$$1R1 \wedge 1R2 \rightarrow 1R1 \text{ y } 1R2$$

$$1R2 \wedge 2R3 \rightarrow 1R3$$

$$2R3 \wedge 3R4 \rightarrow 2R4$$

$$R^2 = \{(1, 1), (1, 2), (1, 3), (2, 4)\}$$

$$1R1 \wedge 1R2 \rightarrow 1R1 \text{ y } 1R2$$

$$1R2 \wedge 1R3 \rightarrow 1R3$$

$$1R2 \wedge 2R4 \rightarrow 1R4$$

$$R^3 = \{(1, 1), (1, 2), (1, 3), (1, 4)\}$$