Exercise from properties of fuzzy implications and fuzzy equivalence relations.

**Exercise 5.1** Find which implications presented explicitly in the lecture satisfy the exchange axiom (for the same implication in all instances)

\[ \alpha \rightarrow (\beta \rightarrow \gamma) = \beta \rightarrow (\alpha \rightarrow \gamma). \]  

(15)

**Exercise 5.2** Find all binary relations \( R \) on the set \( \{A, B, C\} \), which satisfy \( R(A, B) = 0.6 \) and are

1. standard equivalencies,
2. product equivalencies,
3. Łukasiewicz equivalencies.