

Math 2283 - Introduction to Logic

Quiz #13 - 2010.11.22

Name: _____

Remember that the binary operation O is right monotonic in the class K with respect to the two-termed relation R if for any $x, y, z \in K$, we have:

$$yRz \longrightarrow (xOy)R(xOz)$$

If we define K to be the set of real numbers, and the relations A and B as was done in problem 3 of the current chapter:

$$xAy = x, \quad xBy = y,$$

then given the following relations, determine whether or not the property of right monotony is satisfied.

1. Relation R is $<$, with the operation A .

2. Relation R is $<$, with the operation B .

3. Relation R is \leq , with the operation A .

4. Relation R is \leq , with the operation B .