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Compatibility between the Two Package Elements. Binar Relations and Their Properties.

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Abstract: *Compatibility is determined by the letters of the Latin alphabet, such as /, g, t, s. All the functions you know are examples of compatibility. Set X is called the first set of compatibility. The set of elements in a set X that is involved in a match is called the matching domain.*

Keywords: points and directional intersections, arrows, binary relations and their properties, compatibility between the elements of two sets, antisymmetric relations, the field of reflection values.

INTRODUCTION

The set Y is called the second set of compatibility. The set of elements of a set Y involved in a match is called the set of values of the match.

2. The set GfCXx 7 is called the compatibility graph. Drawings that show the compatibility between 2 sets using points and directional intersections, arrows, are called graphs of compatibility. For example:

X = {a \ b; c; d \ e};

Y = {m; n; p; q};

Gf = {(o; m), {b; p), (c; ri), (c; q), (d; p)}.

Field of detection = {a; b; c; d}

set of values a {m; n; p; q}.

METHODS

1. If the field of / conformity overlaps with the first set, / conformity is not defined everywhere.

If / the set of values of compatibility overlaps with the second set, / compatibility is surjective, if / in compatibility each element of the first set corresponds to not more than one element of the second set, / compatibility is functional, if / compatibility is said to be injective if no more than one element of the first set is matched to each element of the second set. Surjective and injective compatibility are, in a word, biased.

It is important to remember that the functional compatibility identified everywhere is a reflection.

If the / compatibility between sets X and Y is an objective reflection, then there is a one-value match between sets X and Y.

If there is a one-to-one correspondence between sets X and Y, then these sets are equally powerful.

The set of all natural numbers is a set of powers equal to N.

Any set of parts G of X x X is called a binary relation. Binary relationships are denoted by the letters P, Q, R, and other Latin letters. In mathematics, binary relations are given by symbols such as "=", "<", ">", "*", "||", "-L". For example: X = {3; 4; 5; 6; 7; 8; 9} The relationship between the elements of the set is given by P. "x> y". It is expressed by the following set of pairs: G = {(4; 3), (5; 3), (5; 4), (6; 3), (6; 4), (6; 5), (7; 3), (7; 4), (7; 5), (7; 6), (9; 3), (9; 4), (9; 5), (9; 6), (9; 7)}.

Packages can have the following relationships:

If each element of the set X has an R relation to itself (i.e., x / fx), then the R relation is said to be reflexive in the X set. For example, the relations "=", "||", "±" are reflexive.

If xRx does not hold for any element of set X, then the relation R is said to be anti-reflexive in set X. For example, the relations "<", ">", "1" are anti-reflexive.

If the set X has a relation R and the conditions xRy and y Rx hold simultaneously, then R is called a symmetric relation. For example, the relations "||", "-L", "=" are symmetric relations.

If it follows from the set X that for the relation R is xRy and yRx is x = y, then R is called an antisymmetric relation. For example, the relation “x is multiple of y” is antisymmetric.

If the relation X in the set X is xRy and yRz for the relation R, then the relation R is called transitive. For example, relations such as "=", ">", "<" are transitive.

If any R relation is reflexive, symmetric, or transitive, then R is called an equivalence relation. For example, relations such as "||", "=", "=" are equivalence relations. The equivalence relationship divides a set into classes.

If the relation R is antisymmetric and transitive, then it is called the order relation R. For example, "<", ">", "<", "s" are ordinal relations.

If the relation R between the elements of the set X and Y corresponds to no more than one element of the set Y in each element of the set X, then R is called a functional relation or function.

31 www.ziyouz.com library If the relation R is functional, then its domain is called the domain of the function. The field of values is called the field of values of the function.

If only one element of Y corresponds to each element of X in the relation R between the elements of the A and Y sets, then the relation R is called a surjective reflection of X to Y.

If the range of values of the reflection is equal to the set, the reflection is called injective.

(The word binar is the Latin word bis, meaning two.

RESULTS

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DISCUSSION

It is important to remember that the functional compatibility identified everywhere is a reflection.

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If there is a one-to-one correspondence between sets X and Y, then these sets are equally powerful.

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CONCLUSION

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