TOA- A={{17,5233 B={1,2,{233

1 C={1,{233. AGB={{13,1,23 Boc=523

AN(BUC)={{1}{233^{1,2,8233 BA) SE:{{233

*A*n ® : 3: *Ở*

B- ;) .

AU(BAC)

(AUB)a Ave) => TRUE.

=) FALSE.

An (Buc)

(AnB) n (Buc)

=> TRUE.

iv) (ex A={1,2,33, 3= {2,3,43

Al B-S13, B1A= {43 => False .

=> FALSE.

AA(B\C)

BI *(*MAC)

{ca,a>, <b,b>,<.,c>,

ca,a>, <a,b>3

Qc Dod

::)

For a relation, I can have up to s pairs. For each pair, it could be either in the relation, or not in the relation. => 2^ possible relations.

Of the r pairs, ng them must be in the relation to be reglexive. There you we can only choose between 1-1 other pairs. => 27-^ pairs.

SU

D- :) RES = R'ÇS"

g*i*orno

**SV**

.RES 2. <x,y) E R' ass. 3. <yox> ER Deindin ginum.

4. 2, x >CS Орал» , алыс I s. (x,y> ES Dayundin og inne *6*. H (x,y> [<<<y> ER"><x,y) €5] -30,5)

7. 1*2*"55 is) (Rn 55': Rs.

|: (x,y) E(RMS)' ass.

2. <yox> E SAR dignition og inner.

<yox> ES . <yox> ER 5. (x,y> ES Dg inverse 6. (try> ERT Diy invuse 7. (x,y) E rins" *& W*ea> (x >< (A + (x,y) < (Cos" a. (Rns)'s Rins"

مر

ن

(x,y> Ernst (x,y) ERA <yox>ER (x,y) EST

<yox> ES ...Chox> Erns.

(x,y) E S^R

14.

16.

17. V (x,y). (X, Y SE Rn5'-> (x,y> E(RMS)" 18. Ky pins's (ans)". ia. Rist = (Rus)" By (18) an (9) ) () RT

- take arbitrary (x,y> E(R)". <=> <yox> E R Dogmania g inuun

=) <yox>¢ R Doo comp = (x,y> ¢ B. Dar inv

> <x,y> E R Dy comp Reasoning world's both ways => RS RTRERT

=> R=R

Cri

Dų

a

composition

iv) (Ross's s'ORO

Tome eriting sty> E (Ros)' => (y,x> E Ros Da inurse => Ja. <y, a> ER Da - <a,y> ERA . Dy inv - <a, x> ES Dy comp E) <+,\*> ES Dg in - <x,y) ER%S" Dg coupe Resery ware born way => (Ross's Store

^SORTE (Ross'

=) (Ros)' = Sop". v) R is Symmetal => NO IDEA M8 PLS HELP

E- :) gof is one to one =>

Jacier. [got(a)gofle')-> a=6] => t ettes got(o)=guf (a) => Vajci EA [fre) flors +49)= 4(6) => f is as to come

nonym.

t

is

bato

wi) got is onto => WC EC, IGEA. (f(a)=C]

=> let f(a)=b EB => WC EC, JbEB. [g(b)=C]

=> g is calor

OGO

®

A-

Seoraving for x in XS.

Y. xs[2] ,

AAD Y: xs [+]

Y: xs [6]

x=y

*о*

*Y*oxs[]

**x>**

**IV**

Itu

--West (x = 3 comportante

B- ;)Orowe Azer. For each element we an inserting, if

He list is pure onduid, it will need to be compared with

every other elimut be your we find it's position. ::) Compons up to 3 cames for each element, thurger 3n. <- ;) W (1)=0

W(n) = x +W (1/2) = N(1/2)

(۱۱۹) لما ۱ : (ii

(1 / 4) نماها ، ا : (( / ) لما112) 12 : احلاهداء (

(((\*) حيا۱۰2) ۱۲۶ ) 12\

(8) 8+ ها +12\:

Sn: a tartart...t are

)وات) ... به مه + 0 - 29

= - : - مم

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: ۰۱

7

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2 - 1وره