

```
In[16]:= PrintRelations[{1, 2}]
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```

R1={ } : {Irr, Sym, Ant, Tr}

R2={{1, 1}} : {Sym, Ant, Tr}

R3={{1, 2}} : {Irr, Ant, Tr}

R4={{2, 1}} : {Irr, Ant, Tr}

R5={{2, 2}} : {Sym, Ant, Tr}

R6={{1, 1}, {1, 2}} : {Ant, Tr}

R7={{1, 1}, {2, 1}} : {Ant, Tr, Func}

R8={{1, 1}, {2, 2}} : {Ref, Sym, Ant, Tr, EqRel, PO, Func, Inj, Sur, Bij}

R9={{1, 2}, {2, 1}} : {Irr, Sym, Func, Inj, Sur, Bij}

R10={{1, 2}, {2, 2}} : {Ant, Tr, Func}

R11={{2, 1}, {2, 2}} : {Ant, Tr}

R12={{1, 1}, {1, 2}, {2, 1}} : {Sym}

R13={{1, 1}, {1, 2}, {2, 2}} : {Ref, Ant, Tr, PO, TO}

R14={{1, 1}, {2, 1}, {2, 2}} : {Ref, Ant, Tr, PO, TO}

R15={{1, 2}, {2, 1}, {2, 2}} : {Sym}

R16={{1, 1}, {1, 2}, {2, 1}, {2, 2}} : {Ref, Sym, Tr, EqRel}

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```
In[17]:= PrintRelations[{1, 2, 3}]
```

```

R1={ } : {Irr, Sym, Ant, Tr}

R2={{1, 1}} : {Sym, Ant, Tr}

R3={{1, 2}} : {Irr, Ant, Tr}

R4={{1, 3}} : {Irr, Ant, Tr}

R5={{2, 1}} : {Irr, Ant, Tr}

R6={{2, 2}} : {Sym, Ant, Tr}

R7={{2, 3}} : {Irr, Ant, Tr}

R8={{3, 1}} : {Irr, Ant, Tr}

R9={{3, 2}} : {Irr, Ant, Tr}

R10={{3, 3}} : {Sym, Ant, Tr}

R11={{1, 1}, {1, 2}} : {Ant, Tr}

R12={{1, 1}, {1, 3}} : {Ant, Tr}

R13={{1, 1}, {2, 1}} : {Ant, Tr}

R14={{1, 1}, {2, 2}} : {Sym, Ant, Tr}

```

$R_{15} = \{\{1, 1\}, \{2, 3\}\} : \{\text{Ant}, \text{Tr}\}$
 $R_{16} = \{\{1, 1\}, \{3, 1\}\} : \{\text{Ant}, \text{Tr}\}$
 $R_{17} = \{\{1, 1\}, \{3, 2\}\} : \{\text{Ant}, \text{Tr}\}$
 $R_{18} = \{\{1, 1\}, \{3, 3\}\} : \{\text{Sym}, \text{Ant}, \text{Tr}\}$
 $R_{19} = \{\{1, 2\}, \{1, 3\}\} : \{\text{Irr}, \text{Ant}, \text{Tr}\}$
 $R_{20} = \{\{1, 2\}, \{2, 1\}\} : \{\text{Irr}, \text{Sym}\}$
 $R_{21} = \{\{1, 2\}, \{2, 2\}\} : \{\text{Ant}, \text{Tr}\}$
 $R_{22} = \{\{1, 2\}, \{2, 3\}\} : \{\text{Irr}, \text{Ant}\}$
 $R_{23} = \{\{1, 2\}, \{3, 1\}\} : \{\text{Irr}, \text{Ant}\}$
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 $R_{27} = \{\{1, 3\}, \{2, 2\}\} : \{\text{Ant}, \text{Tr}\}$
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 $R_{34} = \{\{2, 1\}, \{3, 1\}\} : \{\text{Irr}, \text{Ant}, \text{Tr}\}$
 $R_{35} = \{\{2, 1\}, \{3, 2\}\} : \{\text{Irr}, \text{Ant}\}$
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 $R_{43} = \{\{2, 3\}, \{3, 3\}\} : \{\text{Ant}, \text{Tr}\}$
 $R_{44} = \{\{3, 1\}, \{3, 2\}\} : \{\text{Irr}, \text{Ant}, \text{Tr}\}$
 $R_{45} = \{\{3, 1\}, \{3, 3\}\} : \{\text{Ant}, \text{Tr}\}$
 $R_{46} = \{\{3, 2\}, \{3, 3\}\} : \{\text{Ant}, \text{Tr}\}$

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 $R_{51} = \{\{1, 1\}, \{1, 2\}, \{3, 1\}\} : \{\text{Ant}\}$
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 $R_{53} = \{\{1, 1\}, \{1, 2\}, \{3, 3\}\} : \{\text{Ant}, \text{Tr}\}$
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 $R_{62} = \{\{1, 1\}, \{2, 1\}, \{3, 1\}\} : \{\text{Ant}, \text{Tr}, \text{Func}\}$
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 $R_{66} = \{\{1, 1\}, \{2, 2\}, \{3, 1\}\} : \{\text{Ant}, \text{Tr}, \text{Func}\}$
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 $R_{68} = \{\{1, 1\}, \{2, 2\}, \{3, 3\}\} : \{\text{Ref}, \text{Sym}, \text{Ant}, \text{Tr}, \text{EqRel}, \text{PO}, \text{Func}, \text{Inj}, \text{Sur}, \text{Bij}\}$
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 $R_{70} = \{\{1, 1\}, \{2, 3\}, \{3, 2\}\} : \{\text{Sym}, \text{Func}, \text{Inj}, \text{Sur}, \text{Bij}\}$
 $R_{71} = \{\{1, 1\}, \{2, 3\}, \{3, 3\}\} : \{\text{Ant}, \text{Tr}, \text{Func}\}$
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 $R_{75} = \{\{1, 2\}, \{1, 3\}, \{2, 1\}\} : \{\text{Irr}\}$
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 $R_{77} = \{\{1, 2\}, \{1, 3\}, \{2, 3\}\} : \{\text{Irr}, \text{Ant}, \text{Tr}\}$
 $R_{78} = \{\{1, 2\}, \{1, 3\}, \{3, 1\}\} : \{\text{Irr}\}$

$R_{79} = \{\{1, 2\}, \{1, 3\}, \{3, 2\}\} : \{\text{Irr}, \text{Ant}, \text{Tr}\}$
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 $R_{104} = \{\{1, 3\}, \{2, 2\}, \{3, 3\}\} : \{\text{Ant}, \text{Tr}, \text{Func}\}$
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$R_{111} = \{\{2, 1\}, \{2, 2\}, \{2, 3\}\} : \{\text{Ant}, \text{Tr}\}$
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 $R_{131} = \{\{1, 1\}, \{1, 2\}, \{1, 3\}, \{2, 1\}\} : \{\}$
 $R_{132} = \{\{1, 1\}, \{1, 2\}, \{1, 3\}, \{2, 2\}\} : \{\text{Ant}, \text{Tr}\}$
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 $R_{138} = \{\{1, 1\}, \{1, 2\}, \{2, 1\}, \{2, 3\}\} : \{\}$
 $R_{139} = \{\{1, 1\}, \{1, 2\}, \{2, 1\}, \{3, 1\}\} : \{\}$
 $R_{140} = \{\{1, 1\}, \{1, 2\}, \{2, 1\}, \{3, 2\}\} : \{\}$
 $R_{141} = \{\{1, 1\}, \{1, 2\}, \{2, 1\}, \{3, 3\}\} : \{\text{Sym}\}$
 $R_{142} = \{\{1, 1\}, \{1, 2\}, \{2, 2\}, \{2, 3\}\} : \{\text{Ant}\}$

$R_{143} = \{\{1, 1\}, \{1, 2\}, \{2, 2\}, \{3, 1\}\} : \{\text{Ant}\}$
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 $R_{145} = \{\{1, 1\}, \{1, 2\}, \{2, 2\}, \{3, 3\}\} : \{\text{Ref, Ant, Tr, PO}\}$
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 $R_{161} = \{\{1, 1\}, \{1, 3\}, \{2, 3\}, \{3, 1\}\} : \{\}$
 $R_{162} = \{\{1, 1\}, \{1, 3\}, \{2, 3\}, \{3, 2\}\} : \{\}$
 $R_{163} = \{\{1, 1\}, \{1, 3\}, \{2, 3\}, \{3, 3\}\} : \{\text{Ant, Tr}\}$
 $R_{164} = \{\{1, 1\}, \{1, 3\}, \{3, 1\}, \{3, 2\}\} : \{\}$
 $R_{165} = \{\{1, 1\}, \{1, 3\}, \{3, 1\}, \{3, 3\}\} : \{\text{Sym, Tr}\}$
 $R_{166} = \{\{1, 1\}, \{1, 3\}, \{3, 2\}, \{3, 3\}\} : \{\text{Ant}\}$
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 $R_{170} = \{\{1, 1\}, \{2, 1\}, \{2, 2\}, \{3, 3\}\} : \{\text{Ref, Ant, Tr, PO}\}$
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 $R_{173} = \{\{1, 1\}, \{2, 1\}, \{2, 3\}, \{3, 3\}\} : \{\text{Ant, Tr}\}$
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 $R_{193} = \{\{1, 2\}, \{1, 3\}, \{2, 2\}, \{3, 1\}\} : \{\}$
 $R_{194} = \{\{1, 2\}, \{1, 3\}, \{2, 2\}, \{3, 2\}\} : \{\text{Ant}, \text{Tr}\}$
 $R_{195} = \{\{1, 2\}, \{1, 3\}, \{2, 2\}, \{3, 3\}\} : \{\text{Ant}, \text{Tr}\}$
 $R_{196} = \{\{1, 2\}, \{1, 3\}, \{2, 3\}, \{3, 1\}\} : \{\text{Irr}\}$
 $R_{197} = \{\{1, 2\}, \{1, 3\}, \{2, 3\}, \{3, 2\}\} : \{\text{Irr}\}$
 $R_{198} = \{\{1, 2\}, \{1, 3\}, \{2, 3\}, \{3, 3\}\} : \{\text{Ant}, \text{Tr}\}$
 $R_{199} = \{\{1, 2\}, \{1, 3\}, \{3, 1\}, \{3, 2\}\} : \{\text{Irr}\}$
 $R_{200} = \{\{1, 2\}, \{1, 3\}, \{3, 1\}, \{3, 3\}\} : \{\}$
 $R_{201} = \{\{1, 2\}, \{1, 3\}, \{3, 2\}, \{3, 3\}\} : \{\text{Ant}, \text{Tr}\}$
 $R_{202} = \{\{1, 2\}, \{2, 1\}, \{2, 2\}, \{2, 3\}\} : \{\}$
 $R_{203} = \{\{1, 2\}, \{2, 1\}, \{2, 2\}, \{3, 1\}\} : \{\}$
 $R_{204} = \{\{1, 2\}, \{2, 1\}, \{2, 2\}, \{3, 2\}\} : \{\}$
 $R_{205} = \{\{1, 2\}, \{2, 1\}, \{2, 2\}, \{3, 3\}\} : \{\text{Sym}\}$
 $R_{206} = \{\{1, 2\}, \{2, 1\}, \{2, 3\}, \{3, 1\}\} : \{\text{Irr}\}$

$R_{207} = \{\{1, 2\}, \{2, 1\}, \{2, 3\}, \{3, 2\}\} : \{\text{Irr, Sym}\}$
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 $R_{209} = \{\{1, 2\}, \{2, 1\}, \{3, 1\}, \{3, 2\}\} : \{\text{Irr}\}$
 $R_{210} = \{\{1, 2\}, \{2, 1\}, \{3, 1\}, \{3, 3\}\} : \{\}$
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 $R_{212} = \{\{1, 2\}, \{2, 2\}, \{2, 3\}, \{3, 1\}\} : \{\text{Ant}\}$
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 $R_{217} = \{\{1, 2\}, \{2, 2\}, \{3, 2\}, \{3, 3\}\} : \{\text{Ant, Tr}\}$
 $R_{218} = \{\{1, 2\}, \{2, 3\}, \{3, 1\}, \{3, 2\}\} : \{\text{Irr}\}$
 $R_{219} = \{\{1, 2\}, \{2, 3\}, \{3, 1\}, \{3, 3\}\} : \{\text{Ant}\}$
 $R_{220} = \{\{1, 2\}, \{2, 3\}, \{3, 2\}, \{3, 3\}\} : \{\}$
 $R_{221} = \{\{1, 2\}, \{3, 1\}, \{3, 2\}, \{3, 3\}\} : \{\text{Ant, Tr}\}$
 $R_{222} = \{\{1, 3\}, \{2, 1\}, \{2, 2\}, \{2, 3\}\} : \{\text{Ant, Tr}\}$
 $R_{223} = \{\{1, 3\}, \{2, 1\}, \{2, 2\}, \{3, 1\}\} : \{\}$
 $R_{224} = \{\{1, 3\}, \{2, 1\}, \{2, 2\}, \{3, 2\}\} : \{\text{Ant}\}$
 $R_{225} = \{\{1, 3\}, \{2, 1\}, \{2, 2\}, \{3, 3\}\} : \{\text{Ant}\}$
 $R_{226} = \{\{1, 3\}, \{2, 1\}, \{2, 3\}, \{3, 1\}\} : \{\text{Irr}\}$
 $R_{227} = \{\{1, 3\}, \{2, 1\}, \{2, 3\}, \{3, 2\}\} : \{\text{Irr}\}$
 $R_{228} = \{\{1, 3\}, \{2, 1\}, \{2, 3\}, \{3, 3\}\} : \{\text{Ant, Tr}\}$
 $R_{229} = \{\{1, 3\}, \{2, 1\}, \{3, 1\}, \{3, 2\}\} : \{\text{Irr}\}$
 $R_{230} = \{\{1, 3\}, \{2, 1\}, \{3, 1\}, \{3, 3\}\} : \{\}$
 $R_{231} = \{\{1, 3\}, \{2, 1\}, \{3, 2\}, \{3, 3\}\} : \{\text{Ant}\}$
 $R_{232} = \{\{1, 3\}, \{2, 2\}, \{2, 3\}, \{3, 1\}\} : \{\}$
 $R_{233} = \{\{1, 3\}, \{2, 2\}, \{2, 3\}, \{3, 2\}\} : \{\}$
 $R_{234} = \{\{1, 3\}, \{2, 2\}, \{2, 3\}, \{3, 3\}\} : \{\text{Ant, Tr}\}$
 $R_{235} = \{\{1, 3\}, \{2, 2\}, \{3, 1\}, \{3, 2\}\} : \{\}$
 $R_{236} = \{\{1, 3\}, \{2, 2\}, \{3, 1\}, \{3, 3\}\} : \{\text{Sym}\}$
 $R_{237} = \{\{1, 3\}, \{2, 2\}, \{3, 2\}, \{3, 3\}\} : \{\text{Ant}\}$
 $R_{238} = \{\{1, 3\}, \{2, 3\}, \{3, 1\}, \{3, 2\}\} : \{\text{Irr, Sym}\}$

$R_{239} = \{\{1, 3\}, \{2, 3\}, \{3, 1\}, \{3, 3\}\} : \{\}$
 $R_{240} = \{\{1, 3\}, \{2, 3\}, \{3, 2\}, \{3, 3\}\} : \{\}$
 $R_{241} = \{\{1, 3\}, \{3, 1\}, \{3, 2\}, \{3, 3\}\} : \{\}$
 $R_{242} = \{\{2, 1\}, \{2, 2\}, \{2, 3\}, \{3, 1\}\} : \{\text{Ant}, \text{Tr}\}$
 $R_{243} = \{\{2, 1\}, \{2, 2\}, \{2, 3\}, \{3, 2\}\} : \{\}$
 $R_{244} = \{\{2, 1\}, \{2, 2\}, \{2, 3\}, \{3, 3\}\} : \{\text{Ant}, \text{Tr}\}$
 $R_{245} = \{\{2, 1\}, \{2, 2\}, \{3, 1\}, \{3, 2\}\} : \{\text{Ant}, \text{Tr}\}$
 $R_{246} = \{\{2, 1\}, \{2, 2\}, \{3, 1\}, \{3, 3\}\} : \{\text{Ant}, \text{Tr}\}$
 $R_{247} = \{\{2, 1\}, \{2, 2\}, \{3, 2\}, \{3, 3\}\} : \{\text{Ant}\}$
 $R_{248} = \{\{2, 1\}, \{2, 3\}, \{3, 1\}, \{3, 2\}\} : \{\text{Irr}\}$
 $R_{249} = \{\{2, 1\}, \{2, 3\}, \{3, 1\}, \{3, 3\}\} : \{\text{Ant}, \text{Tr}\}$
 $R_{250} = \{\{2, 1\}, \{2, 3\}, \{3, 2\}, \{3, 3\}\} : \{\}$
 $R_{251} = \{\{2, 1\}, \{3, 1\}, \{3, 2\}, \{3, 3\}\} : \{\text{Ant}, \text{Tr}\}$
 $R_{252} = \{\{2, 2\}, \{2, 3\}, \{3, 1\}, \{3, 2\}\} : \{\}$
 $R_{253} = \{\{2, 2\}, \{2, 3\}, \{3, 1\}, \{3, 3\}\} : \{\text{Ant}\}$
 $R_{254} = \{\{2, 2\}, \{2, 3\}, \{3, 2\}, \{3, 3\}\} : \{\text{Sym}, \text{Tr}\}$
 $R_{255} = \{\{2, 2\}, \{3, 1\}, \{3, 2\}, \{3, 3\}\} : \{\text{Ant}, \text{Tr}\}$
 $R_{256} = \{\{2, 3\}, \{3, 1\}, \{3, 2\}, \{3, 3\}\} : \{\}$
 $R_{257} = \{\{1, 1\}, \{1, 2\}, \{1, 3\}, \{2, 1\}, \{2, 2\}\} : \{\}$
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 $R_{259} = \{\{1, 1\}, \{1, 2\}, \{1, 3\}, \{2, 1\}, \{3, 1\}\} : \{\text{Sym}\}$
 $R_{260} = \{\{1, 1\}, \{1, 2\}, \{1, 3\}, \{2, 1\}, \{3, 2\}\} : \{\}$
 $R_{261} = \{\{1, 1\}, \{1, 2\}, \{1, 3\}, \{2, 1\}, \{3, 3\}\} : \{\}$
 $R_{262} = \{\{1, 1\}, \{1, 2\}, \{1, 3\}, \{2, 2\}, \{2, 3\}\} : \{\text{Ant}, \text{Tr}\}$
 $R_{263} = \{\{1, 1\}, \{1, 2\}, \{1, 3\}, \{2, 2\}, \{3, 1\}\} : \{\}$
 $R_{264} = \{\{1, 1\}, \{1, 2\}, \{1, 3\}, \{2, 2\}, \{3, 2\}\} : \{\text{Ant}, \text{Tr}\}$
 $R_{265} = \{\{1, 1\}, \{1, 2\}, \{1, 3\}, \{2, 2\}, \{3, 3\}\} : \{\text{Ref}, \text{Ant}, \text{Tr}, \text{PO}\}$
 $R_{266} = \{\{1, 1\}, \{1, 2\}, \{1, 3\}, \{2, 3\}, \{3, 1\}\} : \{\}$
 $R_{267} = \{\{1, 1\}, \{1, 2\}, \{1, 3\}, \{2, 3\}, \{3, 2\}\} : \{\}$
 $R_{268} = \{\{1, 1\}, \{1, 2\}, \{1, 3\}, \{2, 3\}, \{3, 3\}\} : \{\text{Ant}, \text{Tr}\}$
 $R_{269} = \{\{1, 1\}, \{1, 2\}, \{1, 3\}, \{3, 1\}, \{3, 2\}\} : \{\}$
 $R_{270} = \{\{1, 1\}, \{1, 2\}, \{1, 3\}, \{3, 1\}, \{3, 3\}\} : \{\}$

$R_{271} = \{\{1, 1\}, \{1, 2\}, \{1, 3\}, \{3, 2\}, \{3, 3\}\} : \{\text{Ant}, \text{Tr}\}$
 $R_{272} = \{\{1, 1\}, \{1, 2\}, \{2, 1\}, \{2, 2\}, \{2, 3\}\} : \{\}$
 $R_{273} = \{\{1, 1\}, \{1, 2\}, \{2, 1\}, \{2, 2\}, \{3, 1\}\} : \{\}$
 $R_{274} = \{\{1, 1\}, \{1, 2\}, \{2, 1\}, \{2, 2\}, \{3, 2\}\} : \{\}$
 $R_{275} = \{\{1, 1\}, \{1, 2\}, \{2, 1\}, \{2, 2\}, \{3, 3\}\} : \{\text{Ref}, \text{Sym}, \text{Tr}, \text{EqRel}\}$
 $R_{276} = \{\{1, 1\}, \{1, 2\}, \{2, 1\}, \{2, 3\}, \{3, 1\}\} : \{\}$
 $R_{277} = \{\{1, 1\}, \{1, 2\}, \{2, 1\}, \{2, 3\}, \{3, 2\}\} : \{\text{Sym}\}$
 $R_{278} = \{\{1, 1\}, \{1, 2\}, \{2, 1\}, \{2, 3\}, \{3, 3\}\} : \{\}$
 $R_{279} = \{\{1, 1\}, \{1, 2\}, \{2, 1\}, \{3, 1\}, \{3, 2\}\} : \{\}$
 $R_{280} = \{\{1, 1\}, \{1, 2\}, \{2, 1\}, \{3, 1\}, \{3, 3\}\} : \{\}$
 $R_{281} = \{\{1, 1\}, \{1, 2\}, \{2, 1\}, \{3, 2\}, \{3, 3\}\} : \{\}$
 $R_{282} = \{\{1, 1\}, \{1, 2\}, \{2, 2\}, \{2, 3\}, \{3, 1\}\} : \{\text{Ant}\}$
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 $R_{284} = \{\{1, 1\}, \{1, 2\}, \{2, 2\}, \{2, 3\}, \{3, 3\}\} : \{\text{Ref}, \text{Ant}\}$
 $R_{285} = \{\{1, 1\}, \{1, 2\}, \{2, 2\}, \{3, 1\}, \{3, 2\}\} : \{\text{Ant}, \text{Tr}\}$
 $R_{286} = \{\{1, 1\}, \{1, 2\}, \{2, 2\}, \{3, 1\}, \{3, 3\}\} : \{\text{Ref}, \text{Ant}\}$
 $R_{287} = \{\{1, 1\}, \{1, 2\}, \{2, 2\}, \{3, 2\}, \{3, 3\}\} : \{\text{Ref}, \text{Ant}, \text{Tr}, \text{PO}\}$
 $R_{288} = \{\{1, 1\}, \{1, 2\}, \{2, 3\}, \{3, 1\}, \{3, 2\}\} : \{\}$
 $R_{289} = \{\{1, 1\}, \{1, 2\}, \{2, 3\}, \{3, 1\}, \{3, 3\}\} : \{\text{Ant}\}$
 $R_{290} = \{\{1, 1\}, \{1, 2\}, \{2, 3\}, \{3, 2\}, \{3, 3\}\} : \{\}$
 $R_{291} = \{\{1, 1\}, \{1, 2\}, \{3, 1\}, \{3, 2\}, \{3, 3\}\} : \{\text{Ant}, \text{Tr}\}$
 $R_{292} = \{\{1, 1\}, \{1, 3\}, \{2, 1\}, \{2, 2\}, \{2, 3\}\} : \{\text{Ant}, \text{Tr}\}$
 $R_{293} = \{\{1, 1\}, \{1, 3\}, \{2, 1\}, \{2, 2\}, \{3, 1\}\} : \{\}$
 $R_{294} = \{\{1, 1\}, \{1, 3\}, \{2, 1\}, \{2, 2\}, \{3, 2\}\} : \{\text{Ant}\}$
 $R_{295} = \{\{1, 1\}, \{1, 3\}, \{2, 1\}, \{2, 2\}, \{3, 3\}\} : \{\text{Ref}, \text{Ant}\}$
 $R_{296} = \{\{1, 1\}, \{1, 3\}, \{2, 1\}, \{2, 3\}, \{3, 1\}\} : \{\}$
 $R_{297} = \{\{1, 1\}, \{1, 3\}, \{2, 1\}, \{2, 3\}, \{3, 2\}\} : \{\}$
 $R_{298} = \{\{1, 1\}, \{1, 3\}, \{2, 1\}, \{2, 3\}, \{3, 3\}\} : \{\text{Ant}, \text{Tr}\}$
 $R_{299} = \{\{1, 1\}, \{1, 3\}, \{2, 1\}, \{3, 1\}, \{3, 2\}\} : \{\}$
 $R_{300} = \{\{1, 1\}, \{1, 3\}, \{2, 1\}, \{3, 1\}, \{3, 3\}\} : \{\}$
 $R_{301} = \{\{1, 1\}, \{1, 3\}, \{2, 1\}, \{3, 2\}, \{3, 3\}\} : \{\text{Ant}\}$
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$R_{303} = \{\{1, 1\}, \{1, 3\}, \{2, 2\}, \{2, 3\}, \{3, 2\}\} : \{\}$
 $R_{304} = \{\{1, 1\}, \{1, 3\}, \{2, 2\}, \{2, 3\}, \{3, 3\}\} : \{\text{Ref, Ant, Tr, PO}\}$
 $R_{305} = \{\{1, 1\}, \{1, 3\}, \{2, 2\}, \{3, 1\}, \{3, 2\}\} : \{\}$
 $R_{306} = \{\{1, 1\}, \{1, 3\}, \{2, 2\}, \{3, 1\}, \{3, 3\}\} : \{\text{Ref, Sym, Tr, EqRel}\}$
 $R_{307} = \{\{1, 1\}, \{1, 3\}, \{2, 2\}, \{3, 2\}, \{3, 3\}\} : \{\text{Ref, Ant}\}$
 $R_{308} = \{\{1, 1\}, \{1, 3\}, \{2, 3\}, \{3, 1\}, \{3, 2\}\} : \{\text{Sym}\}$
 $R_{309} = \{\{1, 1\}, \{1, 3\}, \{2, 3\}, \{3, 1\}, \{3, 3\}\} : \{\}$
 $R_{310} = \{\{1, 1\}, \{1, 3\}, \{2, 3\}, \{3, 2\}, \{3, 3\}\} : \{\}$
 $R_{311} = \{\{1, 1\}, \{1, 3\}, \{3, 1\}, \{3, 2\}, \{3, 3\}\} : \{\}$
 $R_{312} = \{\{1, 1\}, \{2, 1\}, \{2, 2\}, \{2, 3\}, \{3, 1\}\} : \{\text{Ant, Tr}\}$
 $R_{313} = \{\{1, 1\}, \{2, 1\}, \{2, 2\}, \{2, 3\}, \{3, 2\}\} : \{\}$
 $R_{314} = \{\{1, 1\}, \{2, 1\}, \{2, 2\}, \{2, 3\}, \{3, 3\}\} : \{\text{Ref, Ant, Tr, PO}\}$
 $R_{315} = \{\{1, 1\}, \{2, 1\}, \{2, 2\}, \{3, 1\}, \{3, 2\}\} : \{\text{Ant, Tr}\}$
 $R_{316} = \{\{1, 1\}, \{2, 1\}, \{2, 2\}, \{3, 1\}, \{3, 3\}\} : \{\text{Ref, Ant, Tr, PO}\}$
 $R_{317} = \{\{1, 1\}, \{2, 1\}, \{2, 2\}, \{3, 2\}, \{3, 3\}\} : \{\text{Ref, Ant}\}$
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 $R_{319} = \{\{1, 1\}, \{2, 1\}, \{2, 3\}, \{3, 1\}, \{3, 3\}\} : \{\text{Ant, Tr}\}$
 $R_{320} = \{\{1, 1\}, \{2, 1\}, \{2, 3\}, \{3, 2\}, \{3, 3\}\} : \{\}$
 $R_{321} = \{\{1, 1\}, \{2, 1\}, \{3, 1\}, \{3, 2\}, \{3, 3\}\} : \{\text{Ant, Tr}\}$
 $R_{322} = \{\{1, 1\}, \{2, 2\}, \{2, 3\}, \{3, 1\}, \{3, 2\}\} : \{\}$
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 $R_{324} = \{\{1, 1\}, \{2, 2\}, \{2, 3\}, \{3, 2\}, \{3, 3\}\} : \{\text{Ref, Sym, Tr, EqRel}\}$
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 $R_{326} = \{\{1, 1\}, \{2, 3\}, \{3, 1\}, \{3, 2\}, \{3, 3\}\} : \{\}$
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 $R_{328} = \{\{1, 2\}, \{1, 3\}, \{2, 1\}, \{2, 2\}, \{3, 1\}\} : \{\text{Sym}\}$
 $R_{329} = \{\{1, 2\}, \{1, 3\}, \{2, 1\}, \{2, 2\}, \{3, 2\}\} : \{\}$
 $R_{330} = \{\{1, 2\}, \{1, 3\}, \{2, 1\}, \{2, 2\}, \{3, 3\}\} : \{\}$
 $R_{331} = \{\{1, 2\}, \{1, 3\}, \{2, 1\}, \{2, 3\}, \{3, 1\}\} : \{\text{Irr}\}$
 $R_{332} = \{\{1, 2\}, \{1, 3\}, \{2, 1\}, \{2, 3\}, \{3, 2\}\} : \{\text{Irr}\}$
 $R_{333} = \{\{1, 2\}, \{1, 3\}, \{2, 1\}, \{2, 3\}, \{3, 3\}\} : \{\}$
 $R_{334} = \{\{1, 2\}, \{1, 3\}, \{2, 1\}, \{3, 1\}, \{3, 2\}\} : \{\text{Irr}\}$

$R_{335} = \{\{1, 2\}, \{1, 3\}, \{2, 1\}, \{3, 1\}, \{3, 3\}\} : \{\text{Sym}\}$
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 $R_{337} = \{\{1, 2\}, \{1, 3\}, \{2, 2\}, \{2, 3\}, \{3, 1\}\} : \{\}$
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 $R_{339} = \{\{1, 2\}, \{1, 3\}, \{2, 2\}, \{2, 3\}, \{3, 3\}\} : \{\text{Ant}, \text{Tr}\}$
 $R_{340} = \{\{1, 2\}, \{1, 3\}, \{2, 2\}, \{3, 1\}, \{3, 2\}\} : \{\}$
 $R_{341} = \{\{1, 2\}, \{1, 3\}, \{2, 2\}, \{3, 1\}, \{3, 3\}\} : \{\}$
 $R_{342} = \{\{1, 2\}, \{1, 3\}, \{2, 2\}, \{3, 2\}, \{3, 3\}\} : \{\text{Ant}, \text{Tr}\}$
 $R_{343} = \{\{1, 2\}, \{1, 3\}, \{2, 3\}, \{3, 1\}, \{3, 2\}\} : \{\text{Irr}\}$
 $R_{344} = \{\{1, 2\}, \{1, 3\}, \{2, 3\}, \{3, 1\}, \{3, 3\}\} : \{\}$
 $R_{345} = \{\{1, 2\}, \{1, 3\}, \{2, 3\}, \{3, 2\}, \{3, 3\}\} : \{\}$
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 $R_{348} = \{\{1, 2\}, \{2, 1\}, \{2, 2\}, \{2, 3\}, \{3, 2\}\} : \{\text{Sym}\}$
 $R_{349} = \{\{1, 2\}, \{2, 1\}, \{2, 2\}, \{2, 3\}, \{3, 3\}\} : \{\}$
 $R_{350} = \{\{1, 2\}, \{2, 1\}, \{2, 2\}, \{3, 1\}, \{3, 2\}\} : \{\}$
 $R_{351} = \{\{1, 2\}, \{2, 1\}, \{2, 2\}, \{3, 1\}, \{3, 3\}\} : \{\}$
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 $R_{353} = \{\{1, 2\}, \{2, 1\}, \{2, 3\}, \{3, 1\}, \{3, 2\}\} : \{\text{Irr}\}$
 $R_{354} = \{\{1, 2\}, \{2, 1\}, \{2, 3\}, \{3, 1\}, \{3, 3\}\} : \{\}$
 $R_{355} = \{\{1, 2\}, \{2, 1\}, \{2, 3\}, \{3, 2\}, \{3, 3\}\} : \{\text{Sym}\}$
 $R_{356} = \{\{1, 2\}, \{2, 1\}, \{3, 1\}, \{3, 2\}, \{3, 3\}\} : \{\}$
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 $R_{358} = \{\{1, 2\}, \{2, 2\}, \{2, 3\}, \{3, 1\}, \{3, 3\}\} : \{\text{Ant}\}$
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 $R_{360} = \{\{1, 2\}, \{2, 2\}, \{3, 1\}, \{3, 2\}, \{3, 3\}\} : \{\text{Ant}, \text{Tr}\}$
 $R_{361} = \{\{1, 2\}, \{2, 3\}, \{3, 1\}, \{3, 2\}, \{3, 3\}\} : \{\}$
 $R_{362} = \{\{1, 3\}, \{2, 1\}, \{2, 2\}, \{2, 3\}, \{3, 1\}\} : \{\}$
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 $R_{364} = \{\{1, 3\}, \{2, 1\}, \{2, 2\}, \{2, 3\}, \{3, 3\}\} : \{\text{Ant}, \text{Tr}\}$
 $R_{365} = \{\{1, 3\}, \{2, 1\}, \{2, 2\}, \{3, 1\}, \{3, 2\}\} : \{\}$
 $R_{366} = \{\{1, 3\}, \{2, 1\}, \{2, 2\}, \{3, 1\}, \{3, 3\}\} : \{\}$

$R_{367} = \{\{1, 3\}, \{2, 1\}, \{2, 2\}, \{3, 2\}, \{3, 3\}\} : \{\text{Ant}\}$
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 $R_{372} = \{\{1, 3\}, \{2, 2\}, \{2, 3\}, \{3, 1\}, \{3, 2\}\} : \{\text{Sym}\}$
 $R_{373} = \{\{1, 3\}, \{2, 2\}, \{2, 3\}, \{3, 1\}, \{3, 3\}\} : \{\}$
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 $R_{375} = \{\{1, 3\}, \{2, 2\}, \{3, 1\}, \{3, 2\}, \{3, 3\}\} : \{\}$
 $R_{376} = \{\{1, 3\}, \{2, 3\}, \{3, 1\}, \{3, 2\}, \{3, 3\}\} : \{\text{Sym}\}$
 $R_{377} = \{\{2, 1\}, \{2, 2\}, \{2, 3\}, \{3, 1\}, \{3, 2\}\} : \{\}$
 $R_{378} = \{\{2, 1\}, \{2, 2\}, \{2, 3\}, \{3, 1\}, \{3, 3\}\} : \{\text{Ant, Tr}\}$
 $R_{379} = \{\{2, 1\}, \{2, 2\}, \{2, 3\}, \{3, 2\}, \{3, 3\}\} : \{\}$
 $R_{380} = \{\{2, 1\}, \{2, 2\}, \{3, 1\}, \{3, 2\}, \{3, 3\}\} : \{\text{Ant, Tr}\}$
 $R_{381} = \{\{2, 1\}, \{2, 3\}, \{3, 1\}, \{3, 2\}, \{3, 3\}\} : \{\}$
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 $R_{383} = \{\{1, 1\}, \{1, 2\}, \{1, 3\}, \{2, 1\}, \{2, 2\}, \{2, 3\}\} : \{\text{Tr}\}$
 $R_{384} = \{\{1, 1\}, \{1, 2\}, \{1, 3\}, \{2, 1\}, \{2, 2\}, \{3, 1\}\} : \{\text{Sym}\}$
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 $R_{390} = \{\{1, 1\}, \{1, 2\}, \{1, 3\}, \{2, 1\}, \{3, 1\}, \{3, 2\}\} : \{\}$
 $R_{391} = \{\{1, 1\}, \{1, 2\}, \{1, 3\}, \{2, 1\}, \{3, 1\}, \{3, 3\}\} : \{\text{Sym}\}$
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 $R_{394} = \{\{1, 1\}, \{1, 2\}, \{1, 3\}, \{2, 2\}, \{2, 3\}, \{3, 2\}\} : \{\}$
 $R_{395} = \{\{1, 1\}, \{1, 2\}, \{1, 3\}, \{2, 2\}, \{2, 3\}, \{3, 3\}\} : \{\text{Ref, Ant, Tr, PO, TO}\}$
 $R_{396} = \{\{1, 1\}, \{1, 2\}, \{1, 3\}, \{2, 2\}, \{3, 1\}, \{3, 2\}\} : \{\}$
 $R_{397} = \{\{1, 1\}, \{1, 2\}, \{1, 3\}, \{2, 2\}, \{3, 1\}, \{3, 3\}\} : \{\text{Ref}\}$
 $R_{398} = \{\{1, 1\}, \{1, 2\}, \{1, 3\}, \{2, 2\}, \{3, 2\}, \{3, 3\}\} : \{\text{Ref, Ant, Tr, PO, TO}\}$

$R_{399} = \{\{1, 1\}, \{1, 2\}, \{1, 3\}, \{2, 3\}, \{3, 1\}, \{3, 2\}\} : \{\}$
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 $R_{401} = \{\{1, 1\}, \{1, 2\}, \{1, 3\}, \{2, 3\}, \{3, 2\}, \{3, 3\}\} : \{\}$
 $R_{402} = \{\{1, 1\}, \{1, 2\}, \{1, 3\}, \{3, 1\}, \{3, 2\}, \{3, 3\}\} : \{\text{Tr}\}$
 $R_{403} = \{\{1, 1\}, \{1, 2\}, \{2, 1\}, \{2, 2\}, \{2, 3\}, \{3, 1\}\} : \{\}$
 $R_{404} = \{\{1, 1\}, \{1, 2\}, \{2, 1\}, \{2, 2\}, \{2, 3\}, \{3, 2\}\} : \{\text{Sym}\}$
 $R_{405} = \{\{1, 1\}, \{1, 2\}, \{2, 1\}, \{2, 2\}, \{2, 3\}, \{3, 3\}\} : \{\text{Ref}\}$
 $R_{406} = \{\{1, 1\}, \{1, 2\}, \{2, 1\}, \{2, 2\}, \{3, 1\}, \{3, 2\}\} : \{\text{Tr}\}$
 $R_{407} = \{\{1, 1\}, \{1, 2\}, \{2, 1\}, \{2, 2\}, \{3, 1\}, \{3, 3\}\} : \{\text{Ref}\}$
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 $R_{412} = \{\{1, 1\}, \{1, 2\}, \{2, 1\}, \{3, 1\}, \{3, 2\}, \{3, 3\}\} : \{\}$
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 $R_{414} = \{\{1, 1\}, \{1, 2\}, \{2, 2\}, \{2, 3\}, \{3, 1\}, \{3, 3\}\} : \{\text{Ref}, \text{Ant}\}$
 $R_{415} = \{\{1, 1\}, \{1, 2\}, \{2, 2\}, \{2, 3\}, \{3, 2\}, \{3, 3\}\} : \{\text{Ref}\}$
 $R_{416} = \{\{1, 1\}, \{1, 2\}, \{2, 2\}, \{3, 1\}, \{3, 2\}, \{3, 3\}\} : \{\text{Ref}, \text{Ant}, \text{Tr}, \text{PO}, \text{TO}\}$
 $R_{417} = \{\{1, 1\}, \{1, 2\}, \{2, 3\}, \{3, 1\}, \{3, 2\}, \{3, 3\}\} : \{\}$
 $R_{418} = \{\{1, 1\}, \{1, 3\}, \{2, 1\}, \{2, 2\}, \{2, 3\}, \{3, 1\}\} : \{\}$
 $R_{419} = \{\{1, 1\}, \{1, 3\}, \{2, 1\}, \{2, 2\}, \{2, 3\}, \{3, 2\}\} : \{\}$
 $R_{420} = \{\{1, 1\}, \{1, 3\}, \{2, 1\}, \{2, 2\}, \{2, 3\}, \{3, 3\}\} : \{\text{Ref}, \text{Ant}, \text{Tr}, \text{PO}, \text{TO}\}$
 $R_{421} = \{\{1, 1\}, \{1, 3\}, \{2, 1\}, \{2, 2\}, \{3, 1\}, \{3, 2\}\} : \{\}$
 $R_{422} = \{\{1, 1\}, \{1, 3\}, \{2, 1\}, \{2, 2\}, \{3, 1\}, \{3, 3\}\} : \{\text{Ref}\}$
 $R_{423} = \{\{1, 1\}, \{1, 3\}, \{2, 1\}, \{2, 2\}, \{3, 2\}, \{3, 3\}\} : \{\text{Ref}, \text{Ant}\}$
 $R_{424} = \{\{1, 1\}, \{1, 3\}, \{2, 1\}, \{2, 3\}, \{3, 1\}, \{3, 2\}\} : \{\}$
 $R_{425} = \{\{1, 1\}, \{1, 3\}, \{2, 1\}, \{2, 3\}, \{3, 1\}, \{3, 3\}\} : \{\text{Tr}\}$
 $R_{426} = \{\{1, 1\}, \{1, 3\}, \{2, 1\}, \{2, 3\}, \{3, 2\}, \{3, 3\}\} : \{\}$
 $R_{427} = \{\{1, 1\}, \{1, 3\}, \{2, 1\}, \{3, 1\}, \{3, 2\}, \{3, 3\}\} : \{\}$
 $R_{428} = \{\{1, 1\}, \{1, 3\}, \{2, 2\}, \{2, 3\}, \{3, 1\}, \{3, 2\}\} : \{\text{Sym}\}$
 $R_{429} = \{\{1, 1\}, \{1, 3\}, \{2, 2\}, \{2, 3\}, \{3, 1\}, \{3, 3\}\} : \{\text{Ref}\}$
 $R_{430} = \{\{1, 1\}, \{1, 3\}, \{2, 2\}, \{2, 3\}, \{3, 2\}, \{3, 3\}\} : \{\text{Ref}\}$

$R_{431} = \{\{1, 1\}, \{1, 3\}, \{2, 2\}, \{3, 1\}, \{3, 2\}, \{3, 3\}\} : \{\text{Ref}\}$
 $R_{432} = \{\{1, 1\}, \{1, 3\}, \{2, 3\}, \{3, 1\}, \{3, 2\}, \{3, 3\}\} : \{\text{Sym}\}$
 $R_{433} = \{\{1, 1\}, \{2, 1\}, \{2, 2\}, \{2, 3\}, \{3, 1\}, \{3, 2\}\} : \{\}$
 $R_{434} = \{\{1, 1\}, \{2, 1\}, \{2, 2\}, \{2, 3\}, \{3, 1\}, \{3, 3\}\} : \{\text{Ref}, \text{Ant}, \text{Tr}, \text{PO}, \text{TO}\}$
 $R_{435} = \{\{1, 1\}, \{2, 1\}, \{2, 2\}, \{2, 3\}, \{3, 2\}, \{3, 3\}\} : \{\text{Ref}\}$
 $R_{436} = \{\{1, 1\}, \{2, 1\}, \{2, 2\}, \{3, 1\}, \{3, 2\}, \{3, 3\}\} : \{\text{Ref}, \text{Ant}, \text{Tr}, \text{PO}, \text{TO}\}$
 $R_{437} = \{\{1, 1\}, \{2, 1\}, \{2, 3\}, \{3, 1\}, \{3, 2\}, \{3, 3\}\} : \{\}$
 $R_{438} = \{\{1, 1\}, \{2, 2\}, \{2, 3\}, \{3, 1\}, \{3, 2\}, \{3, 3\}\} : \{\text{Ref}\}$
 $R_{439} = \{\{1, 2\}, \{1, 3\}, \{2, 1\}, \{2, 2\}, \{2, 3\}, \{3, 1\}\} : \{\}$
 $R_{440} = \{\{1, 2\}, \{1, 3\}, \{2, 1\}, \{2, 2\}, \{2, 3\}, \{3, 2\}\} : \{\}$
 $R_{441} = \{\{1, 2\}, \{1, 3\}, \{2, 1\}, \{2, 2\}, \{2, 3\}, \{3, 3\}\} : \{\}$
 $R_{442} = \{\{1, 2\}, \{1, 3\}, \{2, 1\}, \{2, 2\}, \{3, 1\}, \{3, 2\}\} : \{\}$
 $R_{443} = \{\{1, 2\}, \{1, 3\}, \{2, 1\}, \{2, 2\}, \{3, 1\}, \{3, 3\}\} : \{\text{Sym}\}$
 $R_{444} = \{\{1, 2\}, \{1, 3\}, \{2, 1\}, \{2, 2\}, \{3, 2\}, \{3, 3\}\} : \{\}$
 $R_{445} = \{\{1, 2\}, \{1, 3\}, \{2, 1\}, \{2, 3\}, \{3, 1\}, \{3, 2\}\} : \{\text{Irr}, \text{Sym}\}$
 $R_{446} = \{\{1, 2\}, \{1, 3\}, \{2, 1\}, \{2, 3\}, \{3, 1\}, \{3, 3\}\} : \{\}$
 $R_{447} = \{\{1, 2\}, \{1, 3\}, \{2, 1\}, \{2, 3\}, \{3, 2\}, \{3, 3\}\} : \{\}$
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 $R_{449} = \{\{1, 2\}, \{1, 3\}, \{2, 2\}, \{2, 3\}, \{3, 1\}, \{3, 2\}\} : \{\}$
 $R_{450} = \{\{1, 2\}, \{1, 3\}, \{2, 2\}, \{2, 3\}, \{3, 1\}, \{3, 3\}\} : \{\}$
 $R_{451} = \{\{1, 2\}, \{1, 3\}, \{2, 2\}, \{2, 3\}, \{3, 2\}, \{3, 3\}\} : \{\text{Tr}\}$
 $R_{452} = \{\{1, 2\}, \{1, 3\}, \{2, 2\}, \{3, 1\}, \{3, 2\}, \{3, 3\}\} : \{\}$
 $R_{453} = \{\{1, 2\}, \{1, 3\}, \{2, 3\}, \{3, 1\}, \{3, 2\}, \{3, 3\}\} : \{\}$
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 $R_{455} = \{\{1, 2\}, \{2, 1\}, \{2, 2\}, \{2, 3\}, \{3, 1\}, \{3, 3\}\} : \{\}$
 $R_{456} = \{\{1, 2\}, \{2, 1\}, \{2, 2\}, \{2, 3\}, \{3, 2\}, \{3, 3\}\} : \{\text{Sym}\}$
 $R_{457} = \{\{1, 2\}, \{2, 1\}, \{2, 2\}, \{3, 1\}, \{3, 2\}, \{3, 3\}\} : \{\}$
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 $R_{459} = \{\{1, 2\}, \{2, 2\}, \{2, 3\}, \{3, 1\}, \{3, 2\}, \{3, 3\}\} : \{\}$
 $R_{460} = \{\{1, 3\}, \{2, 1\}, \{2, 2\}, \{2, 3\}, \{3, 1\}, \{3, 2\}\} : \{\}$
 $R_{461} = \{\{1, 3\}, \{2, 1\}, \{2, 2\}, \{2, 3\}, \{3, 1\}, \{3, 3\}\} : \{\}$
 $R_{462} = \{\{1, 3\}, \{2, 1\}, \{2, 2\}, \{2, 3\}, \{3, 2\}, \{3, 3\}\} : \{\}$

$R_{463} = \{\{1, 3\}, \{2, 1\}, \{2, 2\}, \{3, 1\}, \{3, 2\}, \{3, 3\}\} : \{\}$
 $R_{464} = \{\{1, 3\}, \{2, 1\}, \{2, 3\}, \{3, 1\}, \{3, 2\}, \{3, 3\}\} : \{\}$
 $R_{465} = \{\{1, 3\}, \{2, 2\}, \{2, 3\}, \{3, 1\}, \{3, 2\}, \{3, 3\}\} : \{\text{Sym}\}$
 $R_{466} = \{\{2, 1\}, \{2, 2\}, \{2, 3\}, \{3, 1\}, \{3, 2\}, \{3, 3\}\} : \{\text{Tr}\}$
 $R_{467} = \{\{1, 1\}, \{1, 2\}, \{1, 3\}, \{2, 1\}, \{2, 2\}, \{2, 3\}, \{3, 1\}\} : \{\}$
 $R_{468} = \{\{1, 1\}, \{1, 2\}, \{1, 3\}, \{2, 1\}, \{2, 2\}, \{2, 3\}, \{3, 2\}\} : \{\}$
 $R_{469} = \{\{1, 1\}, \{1, 2\}, \{1, 3\}, \{2, 1\}, \{2, 2\}, \{2, 3\}, \{3, 3\}\} : \{\text{Ref}, \text{Tr}\}$
 $R_{470} = \{\{1, 1\}, \{1, 2\}, \{1, 3\}, \{2, 1\}, \{2, 2\}, \{3, 1\}, \{3, 2\}\} : \{\}$
 $R_{471} = \{\{1, 1\}, \{1, 2\}, \{1, 3\}, \{2, 1\}, \{2, 2\}, \{3, 1\}, \{3, 3\}\} : \{\text{Ref}, \text{Sym}\}$
 $R_{472} = \{\{1, 1\}, \{1, 2\}, \{1, 3\}, \{2, 1\}, \{2, 2\}, \{3, 2\}, \{3, 3\}\} : \{\text{Ref}\}$
 $R_{473} = \{\{1, 1\}, \{1, 2\}, \{1, 3\}, \{2, 1\}, \{2, 3\}, \{3, 1\}, \{3, 2\}\} : \{\text{Sym}\}$
 $R_{474} = \{\{1, 1\}, \{1, 2\}, \{1, 3\}, \{2, 1\}, \{2, 3\}, \{3, 1\}, \{3, 3\}\} : \{\}$
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 $R_{477} = \{\{1, 1\}, \{1, 2\}, \{1, 3\}, \{2, 2\}, \{2, 3\}, \{3, 1\}, \{3, 2\}\} : \{\}$
 $R_{478} = \{\{1, 1\}, \{1, 2\}, \{1, 3\}, \{2, 2\}, \{2, 3\}, \{3, 1\}, \{3, 3\}\} : \{\text{Ref}\}$
 $R_{479} = \{\{1, 1\}, \{1, 2\}, \{1, 3\}, \{2, 2\}, \{2, 3\}, \{3, 2\}, \{3, 3\}\} : \{\text{Ref}, \text{Tr}\}$
 $R_{480} = \{\{1, 1\}, \{1, 2\}, \{1, 3\}, \{2, 2\}, \{3, 1\}, \{3, 2\}, \{3, 3\}\} : \{\text{Ref}, \text{Tr}\}$
 $R_{481} = \{\{1, 1\}, \{1, 2\}, \{1, 3\}, \{2, 3\}, \{3, 1\}, \{3, 2\}, \{3, 3\}\} : \{\}$
 $R_{482} = \{\{1, 1\}, \{1, 2\}, \{2, 1\}, \{2, 2\}, \{2, 3\}, \{3, 1\}, \{3, 2\}\} : \{\}$
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 $R_{484} = \{\{1, 1\}, \{1, 2\}, \{2, 1\}, \{2, 2\}, \{2, 3\}, \{3, 2\}, \{3, 3\}\} : \{\text{Ref}, \text{Sym}\}$
 $R_{485} = \{\{1, 1\}, \{1, 2\}, \{2, 1\}, \{2, 2\}, \{3, 1\}, \{3, 2\}, \{3, 3\}\} : \{\text{Ref}, \text{Tr}\}$
 $R_{486} = \{\{1, 1\}, \{1, 2\}, \{2, 1\}, \{2, 3\}, \{3, 1\}, \{3, 2\}, \{3, 3\}\} : \{\}$
 $R_{487} = \{\{1, 1\}, \{1, 2\}, \{2, 2\}, \{2, 3\}, \{3, 1\}, \{3, 2\}, \{3, 3\}\} : \{\text{Ref}\}$
 $R_{488} = \{\{1, 1\}, \{1, 3\}, \{2, 1\}, \{2, 2\}, \{2, 3\}, \{3, 1\}, \{3, 2\}\} : \{\}$
 $R_{489} = \{\{1, 1\}, \{1, 3\}, \{2, 1\}, \{2, 2\}, \{2, 3\}, \{3, 1\}, \{3, 3\}\} : \{\text{Ref}, \text{Tr}\}$
 $R_{490} = \{\{1, 1\}, \{1, 3\}, \{2, 1\}, \{2, 2\}, \{2, 3\}, \{3, 2\}, \{3, 3\}\} : \{\text{Ref}\}$
 $R_{491} = \{\{1, 1\}, \{1, 3\}, \{2, 1\}, \{2, 2\}, \{3, 1\}, \{3, 2\}, \{3, 3\}\} : \{\text{Ref}\}$
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 $R_{493} = \{\{1, 1\}, \{1, 3\}, \{2, 2\}, \{2, 3\}, \{3, 1\}, \{3, 2\}, \{3, 3\}\} : \{\text{Ref}, \text{Sym}\}$
 $R_{494} = \{\{1, 1\}, \{2, 1\}, \{2, 2\}, \{2, 3\}, \{3, 1\}, \{3, 2\}, \{3, 3\}\} : \{\text{Ref}, \text{Tr}\}$

$R_{495} = \{\{1, 2\}, \{1, 3\}, \{2, 1\}, \{2, 2\}, \{2, 3\}, \{3, 1\}, \{3, 2\}\} : \{\text{Sym}\}$
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 $R_{502} = \{\{1, 3\}, \{2, 1\}, \{2, 2\}, \{2, 3\}, \{3, 1\}, \{3, 2\}, \{3, 3\}\} : \{\}$
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