

Practicum3

Varun Sriram

November 20, 2018

Problem 2

#Question 2

```
library(cluster)
```

```
library(arules)
```

```
## Warning: package 'arules' was built under R version 3.4.4
```

```
## Loading required package: Matrix
```

```
##
```

```
## Attaching package: 'arules'
```

```
## The following objects are masked from 'package:base':
```

```
##
```

```
##      abbreviate, write
```

```
plant <- read.transactions("plants.data", sep=",") #Checked R documentation for this function. It was a  
summary(plant)
```

```
## transactions as itemMatrix in sparse format with
```

```
## 34781 rows (elements/itemsets/transactions) and
```

```
## 34851 columns (items) and a density of 0.0002779312
```

```
##
```

```
## most frequent items:
```

```
##      ca      tx      or      az      fl (Other)
```

```
## 11676 8483 7028 6778 6621 296309
```

```
##
```

```
## element (itemset/transaction) length distribution:
```

```
## sizes
```

```
##      2      3      4      5      6      7      8      9     10     11     12     13
```

```
## 11566 4874 2954 2107 1366 1094 859 744 655 562 503 421
```

```
##      14      15      16      17      18      19      20      21      22      23      24      25
```

```
## 421 333 322 284 252 241 249 207 200 212 198 195
```

```
##      26      27      28      29      30      31      32      33      34      35      36      37
```

```
## 155 152 190 179 159 146 140 146 148 147 119 123
```

```
##      38      39      40      41      42      43      44      45      46      47      48      49
```

```
## 110 124 118 114 83 85 102 90 90 75 64 89
```

```
##      50      51      52      53      54      55      56      57      58      59      60      61
```

```
## 63 60 64 68 56 54 51 59 47 45 39 59
```

```
##      62      63      64      65      66      67      68      69      70
```

```
## 52 43 39 43 47 60 35 26 4
```

```
##
```

```
##      Min. 1st Qu.  Median      Mean 3rd Qu.      Max.
```

```
## 2.000 2.000 4.000 9.686 10.000 70.000
```

```
##
```

```
## includes extended item information - examples:
```

```
##      labels
```

```
## 1      *achnella
```

```
## 2 *achnella caduca
```

```
## 3      *agroelymus
plant
```

```
## transactions in sparse format with
## 34781 transactions (rows) and
## 34851 items (columns)
```

```
inspect(plant[1:6])
```

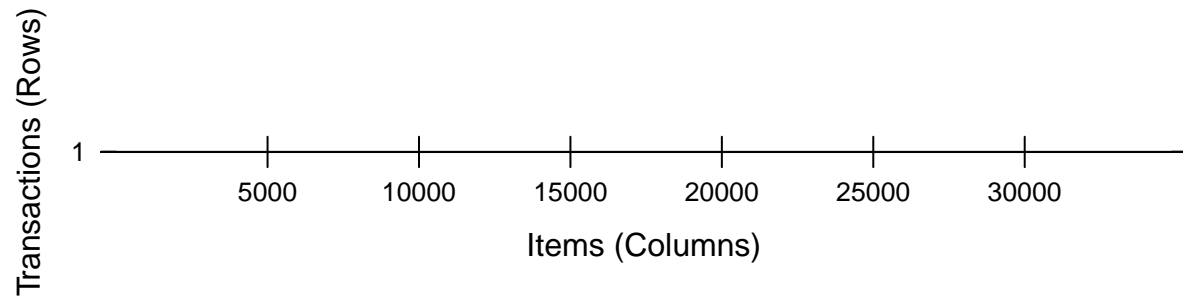
```
##      items
## [1] {abelia,
##      fl,
##      nc}
## [2] {abelia x grandiflora,
##      fl,
##      nc}
## [3] {abelmoschus,
##      ct,
##      dc,
##      fl,
##      hi,
##      il,
##      ky,
##      la,
##      md,
##      mi,
##      ms,
##      nc,
##      pr,
##      sc,
##      va,
##      vi}
## [4] {abelmoschus esculentus,
##      ct,
##      dc,
##      fl,
##      il,
##      ky,
##      la,
##      md,
##      mi,
##      ms,
##      nc,
##      pr,
##      sc,
##      va,
##      vi}
## [5] {abelmoschus moschatus,
##      hi,
##      pr}
## [6] {ab,
##      abies,
##      ak,
##      az,
```

```
##      bc,
##      ca,
##      co,
##      ct,
##      fraspm,
##      ga,
##      ia,
##      id,
##      in,
##      lb,
##      ma,
##      mb,
##      md,
##      me,
##      mi,
##      mn,
##      mt,
##      nb,
##      nc,
##      nf,
##      nh,
##      nm,
##      ns,
##      nt,
##      nu,
##      nv,
##      ny,
##      oh,
##      on,
##      or,
##      pa,
##      pe,
##      qc,
##      ri,
##      sk,
##      tn,
##      ut,
##      va,
##      vt,
##      wa,
##      wi,
##      wv,
##      wy,
##      yt}
```

```
dim(plant)
```

```
## [1] 34781 34851
```

```
#Now we create col names, I manually counted the max number of occurences of a genus and it came to 15
image(plant[1:6])
```



```
itemFrequencyPlot(plant, topN=20) #Notes the top 20 categories
plantrules <- apriori(plant, parameter = list(support = .09, confidence = 0.75, minlen = 3))
```

```
## Apriori
##
## Parameter specification:
## confidence minval smax arem aval originalSupport maxtime support minlen
##      0.75      0.1    1 none FALSE          TRUE      5      0.09      3
## maxlen target   ext
##      10    rules FALSE
##
## Algorithmic control:
## filter tree heap memopt load sort verbose
##      0.1 TRUE TRUE  FALSE TRUE     2    TRUE
##
## Absolute minimum support count: 3130
##
## set item appearances ...[0 item(s)] done [0.00s].
## set transactions ...[34851 item(s), 34781 transaction(s)] done [0.04s].
## sorting and recoding items ... [53 item(s)] done [0.01s].
## creating transaction tree ... done [0.01s].
## checking subsets of size 1 2 3 4 5 6 done [0.09s].
## writing ... [2834 rule(s)] done [0.00s].
## creating S4 object ... done [0.00s].
```

```
#RELIABLE PERCENTAGE of 9 percent aka appears at least ~3130 times/minimum threshold = support, rules s
#There should at least be 3 categories that occurred with the thresholds put altogether
```

```
planrulesmin <- apriori(plant, parameter = list(support = .1, confidence = 0.25, minlen = 2))
```

```
## Apriori
##
## Parameter specification:
## confidence minval smax arem aval originalSupport maxtime support minlen
##      0.25      0.1    1 none FALSE          TRUE      5      0.1      2
## maxlen target  ext
##      10  rules FALSE
##
## Algorithmic control:
## filter tree heap memopt load sort verbose
##      0.1 TRUE TRUE  FALSE TRUE      2      TRUE
##
## Absolute minimum support count: 3478
##
## set item appearances ...[0 item(s)] done [0.00s].
## set transactions ...[34851 item(s), 34781 transaction(s)] done [0.04s].
## sorting and recoding items ... [49 item(s)] done [0.01s].
## creating transaction tree ... done [0.01s].
## checking subsets of size 1 2 3 4 5 done [0.04s].
## writing ... [789 rule(s)] done [0.00s].
## creating S4 object ... done [0.01s].
```

```
#Same as above but There should be at least 2 categories put altogether
summary(planrules)
```

```
## set of 2834 rules
##
## rule length distribution (lhs + rhs):sizes
##      3      4      5      6
## 1353 1135  340      6
##
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##      3.000   3.000   4.000   3.647   4.000   6.000
##
## summary of quality measures:
##      support      confidence      lift      count
## Min.      :0.09002   Min.      :0.7504   Min.      :2.381   Min.      :3131
## 1st Qu.:0.09149   1st Qu.:0.8682   1st Qu.:5.704   1st Qu.:3182
## Median :0.09347   Median :0.9142   Median :6.051   Median :3251
## Mean      :0.09523   Mean      :0.9058   Mean      :6.069   Mean      :3312
## 3rd Qu.:0.09715   3rd Qu.:0.9530   3rd Qu.:6.478   3rd Qu.:3379
## Max.      :0.12786   Max.      :0.9949   Max.      :7.975   Max.      :4447
##
## mining info:
## data ntransactions support confidence
## plant      34781      0.09      0.75
```

```
inspect(planrules[1:5])
```

```
##      lhs      rhs support confidence lift      count
## [1] {nv,ut} => {ca} 0.09591444 0.8300572 2.472612 3336
## [2] {ca,ut} => {nv} 0.09591444 0.8660436 5.312498 3336
## [3] {nv,or} => {ca} 0.09168799 0.9111429 2.714154 3189
```

```
## [4] {ut,wy} => {co} 0.09163049 0.9118741 5.803457 3187
## [5] {co,wy} => {ut} 0.09163049 0.8297318 4.777173 3187
```

```
inspect(planrulesmin[1:5]) #noting how nv despite being the top 5 categories occuring did not appear t
```

```
##      lhs      rhs support confidence lift      count
## [1] {nv} => {ut} 0.1155516 0.7088183 4.081015 4019
## [2] {ut} => {nv} 0.1155516 0.6652872 4.081015 4019
## [3] {nv} => {or} 0.1006297 0.6172840 3.054888 3500
## [4] {or} => {nv} 0.1006297 0.4980080 3.054888 3500
## [5] {nv} => {ca} 0.1351600 0.8291005 2.469762 4701
```

```
inspect(sort(planrules), by = "lift") #using minlen = 3 version for simplicity - essentially order of
```

```
##      lhs      rhs support confidence lift      count
## [1] {ga,sc}    => {nc} 0.12785716 0.9224227 5.413902 4447
## [2] {nc,sc}    => {ga} 0.12785716 0.9264583 5.422946 4447
## [3] {ga,nc}    => {sc} 0.12785716 0.9201324 5.891592 4447
## [4] {al,sc}    => {ga} 0.12426325 0.9608715 5.624381 4322
## [5] {ga,sc}    => {al} 0.12426325 0.8964945 5.468428 4322
## [6] {al,ga}    => {sc} 0.12426325 0.8764956 5.612186 4322
## [7] {al,ga}    => {nc} 0.12207815 0.8610829 5.053886 4246
## [8] {al,nc}    => {ga} 0.12207815 0.9488268 5.553878 4246
## [9] {ga,nc}    => {al} 0.12207815 0.8785433 5.358930 4246
## [10] {al,sc}   => {nc} 0.11926052 0.9221876 5.412522 4148
## [11] {nc,sc}   => {al} 0.11926052 0.8641667 5.271235 4148
## [12] {al,nc}   => {sc} 0.11926052 0.9269274 5.935100 4148
## [13] {ga,nc}   => {va} 0.11857048 0.8533002 5.264036 4124
## [14] {ga,va}   => {nc} 0.11857048 0.9701247 5.693876 4124
## [15] {nc,va}   => {ga} 0.11857048 0.8496086 4.973113 4124
## [16] {nc,sc}   => {va} 0.11696041 0.8475000 5.228254 4068
## [17] {sc,va}   => {nc} 0.11696041 0.9757736 5.727030 4068
## [18] {nc,va}   => {sc} 0.11696041 0.8380717 5.366158 4068
## [19] {al,ms}    => {ga} 0.11641413 0.9323049 5.457169 4049
## [20] {ga,ms}    => {al} 0.11641413 0.9597061 5.854005 4049
## [21] {al,ga}    => {ms} 0.11641413 0.8211316 5.931418 4049
## [22] {al,ga,sc} => {nc} 0.11609787 0.9342897 5.483552 4038
## [23] {al,nc,sc} => {ga} 0.11609787 0.9734812 5.698191 4038
## [24] {ga,nc,sc} => {al} 0.11609787 0.9080279 5.538779 4038
## [25] {al,ga,nc} => {sc} 0.11609787 0.9510127 6.089318 4038
## [26] {md,nc}    => {va} 0.11575285 0.9673234 5.967449 4026
## [27] {md,va}    => {nc} 0.11575285 0.9037037 5.304036 4026
## [28] {nc,va}    => {md} 0.11575285 0.8294190 5.647616 4026
## [29] {nj,pa}    => {ny} 0.11457405 0.9378677 5.650438 3985
## [30] {nj,ny}    => {pa} 0.11457405 0.9367654 5.952071 3985
## [31] {ny,pa}    => {nj} 0.11457405 0.8566208 6.178791 3985
## [32] {ma,pa}    => {ny} 0.11414278 0.9600967 5.784362 3970
## [33] {ma,ny}    => {pa} 0.11414278 0.9080512 5.769626 3970
## [34] {ny,pa}    => {ma} 0.11414278 0.8533964 5.980653 3970
## [35] {nc,tn}    => {va} 0.11397027 0.9422391 5.812703 3964
## [36] {tn,va}    => {nc} 0.11397027 0.9375591 5.502741 3964
## [37] {nc,va}    => {tn} 0.11397027 0.8166461 5.796687 3964
## [38] {or,wa}     => {ca} 0.11394152 0.7991531 2.380553 3963
## [39] {ca,wa}     => {or} 0.11394152 0.9698972 4.799942 3963
## [40] {md,va}     => {pa} 0.11190018 0.8736251 5.550887 3892
```

## [41]	{md,pa}	=> {va}	0.11190018	0.9224935	5.690891	3892
## [42]	{pa,va}	=> {md}	0.11190018	0.9091334	6.190401	3892
## [43]	{oh,pa}	=> {ny}	0.11175642	0.9241560	5.567828	3887
## [44]	{ny,oh}	=> {pa}	0.11175642	0.9480488	6.023764	3887
## [45]	{ny,pa}	=> {oh}	0.11175642	0.8355546	6.089988	3887
## [46]	{ga,sc}	=> {va}	0.11161266	0.8052271	4.967472	3882
## [47]	{sc,va}	=> {ga}	0.11161266	0.9311586	5.450459	3882
## [48]	{ga,va}	=> {sc}	0.11161266	0.9131969	5.847184	3882
## [49]	{ct,ma}	=> {ny}	0.11152641	0.9699925	5.843982	3879
## [50]	{ct,ny}	=> {ma}	0.11152641	0.9387706	6.578960	3879
## [51]	{ma,ny}	=> {ct}	0.11152641	0.8872370	7.027782	3879
## [52]	{al,nc}	=> {va}	0.11109514	0.8634637	5.326735	3864
## [53]	{al,va}	=> {nc}	0.11109514	0.9547813	5.603822	3864
## [54]	{nc,va}	=> {al}	0.11109514	0.7960445	4.855704	3864
## [55]	{al,fl}	=> {ga}	0.11075012	0.9257390	5.418736	3852
## [56]	{fl,ga}	=> {al}	0.11075012	0.9059266	5.525962	3852
## [57]	{al,ga}	=> {fl}	0.11075012	0.7811803	4.103645	3852
## [58]	{ct,pa}	=> {ny}	0.11043386	0.9748731	5.873387	3841
## [59]	{ct,ny}	=> {pa}	0.11043386	0.9295741	5.906378	3841
## [60]	{ny,pa}	=> {ct}	0.11043386	0.8256664	6.540083	3841
## [61]	{pa,va}	=> {ny}	0.11014634	0.8948844	5.391473	3831
## [62]	{ny,va}	=> {pa}	0.11014634	0.9369039	5.952951	3831
## [63]	{ny,pa}	=> {va}	0.11014634	0.8235168	5.080301	3831
## [64]	{ms,sc}	=> {ga}	0.11003134	0.9666582	5.658253	3827
## [65]	{ga,ms}	=> {sc}	0.11003134	0.9070870	5.808062	3827
## [66]	{ga,sc}	=> {ms}	0.11003134	0.7938187	5.734124	3827
## [67]	{md,pa}	=> {ny}	0.10997384	0.9066129	5.462135	3825
## [68]	{md,ny}	=> {pa}	0.10997384	0.9432799	5.993463	3825
## [69]	{ny,pa}	=> {md}	0.10997384	0.8222270	5.598645	3825
## [70]	{ga,nc,sc}	=> {va}	0.10997384	0.8601304	5.306172	3825
## [71]	{ga,sc,va}	=> {nc}	0.10997384	0.9853168	5.783042	3825
## [72]	{nc,sc,va}	=> {ga}	0.10997384	0.9402655	5.503765	3825
## [73]	{ga,nc,va}	=> {sc}	0.10997384	0.9274976	5.938751	3825
## [74]	{ms,sc}	=> {al}	0.10939881	0.9611013	5.862516	3805
## [75]	{al,ms}	=> {sc}	0.10939881	0.8761225	5.609797	3805
## [76]	{al,sc}	=> {ms}	0.10939881	0.8459315	6.110560	3805
## [77]	{al,ga}	=> {va}	0.10891004	0.7682012	4.739057	3788
## [78]	{al,va}	=> {ga}	0.10891004	0.9360020	5.478809	3788
## [79]	{ga,va}	=> {al}	0.10891004	0.8910845	5.435428	3788
## [80]	{la,ms}	=> {al}	0.10830626	0.9239637	5.635984	3767
## [81]	{al,ms}	=> {la}	0.10830626	0.8673728	5.853336	3767
## [82]	{al,la}	=> {ms}	0.10830626	0.9208018	6.651382	3767
## [83]	{md,nj}	=> {va}	0.10822001	0.9398252	5.797811	3764
## [84]	{nj,va}	=> {md}	0.10822001	0.9326065	6.350233	3764
## [85]	{md,va}	=> {nj}	0.10822001	0.8448934	6.094201	3764
## [86]	{al,la}	=> {ga}	0.10819125	0.9198240	5.384113	3763
## [87]	{ga,la}	=> {al}	0.10819125	0.9433442	5.754201	3763
## [88]	{al,ga}	=> {la}	0.10819125	0.7631312	5.149877	3763
## [89]	{ma,nj}	=> {ny}	0.10810500	0.9745982	5.871731	3760
## [90]	{nj,ny}	=> {ma}	0.10810500	0.8838740	6.194242	3760
## [91]	{ma,ny}	=> {nj}	0.10810500	0.8600183	6.203297	3760
## [92]	{nc,va}	=> {pa}	0.10784624	0.7727647	4.910035	3751
## [93]	{nc,pa}	=> {va}	0.10784624	0.9498607	5.859721	3751
## [94]	{pa,va}	=> {nc}	0.10784624	0.8761972	5.142594	3751

## [95]	{ga,ms}	=> {nc}	0.10781749	0.8888362	5.216776	3750
## [96]	{ms,nc}	=> {ga}	0.10781749	0.9585890	5.611020	3750
## [97]	{ga,nc}	=> {ms}	0.10781749	0.7759156	5.604802	3750
## [98]	{al,ms}	=> {nc}	0.10732871	0.8595441	5.044854	3733
## [99]	{ms,nc}	=> {al}	0.10732871	0.9542434	5.820684	3733
## [100]	{al,nc}	=> {ms}	0.10732871	0.8341899	6.025745	3733
## [101]	{md,nj}	=> {pa}	0.10724246	0.9313358	5.917572	3730
## [102]	{nj,pa}	=> {md}	0.10724246	0.8778536	5.977413	3730
## [103]	{md,pa}	=> {nj}	0.10724246	0.8840958	6.376967	3730
## [104]	{fl,sc}	=> {ga}	0.10712745	0.9526975	5.576535	3726
## [105]	{fl,ga}	=> {sc}	0.10712745	0.8762935	5.610892	3726
## [106]	{ga,sc}	=> {fl}	0.10712745	0.7728687	4.059983	3726
## [107]	{ga,tn}	=> {nc}	0.10706995	0.9359135	5.493083	3724
## [108]	{ga,nc}	=> {tn}	0.10706995	0.7705359	5.469390	3724
## [109]	{nc,tn}	=> {ga}	0.10706995	0.8851913	5.181394	3724
## [110]	{in,oh}	=> {il}	0.10706995	0.9536492	6.419367	3724
## [111]	{il,in}	=> {oh}	0.10706995	0.9008224	6.565697	3724
## [112]	{il,oh}	=> {in}	0.10706995	0.9116279	7.141291	3724
## [113]	{il,oh}	=> {pa}	0.10701245	0.9111383	5.789240	3722
## [114]	{oh,pa}	=> {il}	0.10701245	0.8849263	5.956768	3722
## [115]	{il,pa}	=> {oh}	0.10701245	0.9190123	6.698275	3722
## [116]	{al,ms,sc}	=> {ga}	0.10692620	0.9773982	5.721118	3719
## [117]	{ga,ms,sc}	=> {al}	0.10692620	0.9717795	5.927650	3719
## [118]	{al,ga,ms}	=> {sc}	0.10692620	0.9184984	5.881129	3719
## [119]	{al,ga,sc}	=> {ms}	0.10692620	0.8604813	6.215659	3719
## [120]	{nj,va}	=> {pa}	0.10686869	0.9209613	5.851654	3717
## [121]	{nj,pa}	=> {va}	0.10686869	0.8747941	5.396632	3717
## [122]	{pa,va}	=> {nj}	0.10686869	0.8682551	6.262708	3717
## [123]	{il,pa}	=> {ny}	0.10678244	0.9170370	5.524938	3714
## [124]	{il,ny}	=> {pa}	0.10678244	0.9319950	5.921761	3714
## [125]	{ny,pa}	=> {il}	0.10678244	0.7983663	5.374101	3714
## [126]	{ct,ma}	=> {pa}	0.10675369	0.9284821	5.899440	3713
## [127]	{ct,pa}	=> {ma}	0.10675369	0.9423858	6.604296	3713
## [128]	{ma,pa}	=> {ct}	0.10675369	0.8979444	7.112595	3713
## [129]	{md,va}	=> {ny}	0.10666743	0.8327722	5.017261	3710
## [130]	{md,ny}	=> {va}	0.10666743	0.9149199	5.644169	3710
## [131]	{ny,va}	=> {md}	0.10666743	0.9073123	6.178001	3710
## [132]	{mi,pa}	=> {ny}	0.10658118	0.9581287	5.772506	3707
## [133]	{mi,ny}	=> {pa}	0.10658118	0.9074663	5.765909	3707
## [134]	{ny,pa}	=> {mi}	0.10658118	0.7968616	5.854593	3707
## [135]	{ms,sc}	=> {nc}	0.10632242	0.9340743	5.482288	3698
## [136]	{ms,nc}	=> {sc}	0.10632242	0.9452965	6.052717	3698
## [137]	{nc,sc}	=> {ms}	0.10632242	0.7704167	5.565080	3698
## [138]	{al,ga,nc}	=> {va}	0.10620741	0.8699953	5.367028	3694
## [139]	{al,ga,va}	=> {nc}	0.10620741	0.9751848	5.723574	3694
## [140]	{al,nc,va}	=> {ga}	0.10620741	0.9560041	5.595890	3694
## [141]	{ga,nc,va}	=> {al}	0.10620741	0.8957323	5.463779	3694
## [142]	{id,wa}	=> {or}	0.10617866	0.9304611	4.604776	3693
## [143]	{id,or}	=> {wa}	0.10617866	0.8794951	5.410279	3693
## [144]	{md,nj}	=> {ny}	0.10600615	0.9205993	5.546399	3687
## [145]	{nj,ny}	=> {md}	0.10600615	0.8667137	5.901560	3687
## [146]	{md,ny}	=> {nj}	0.10600615	0.9092478	6.558388	3687
## [147]	{al,sc}	=> {va}	0.10586240	0.8185860	5.049883	3682
## [148]	{sc,va}	=> {al}	0.10586240	0.8831854	5.387245	3682

## [149]	{al,va}	=> {sc}	0.10586240	0.9098097	5.825496	3682
## [150]	{ct,nj}	=> {ny}	0.10557488	0.9799840	5.904179	3672
## [151]	{ct,ny}	=> {nj}	0.10557488	0.8886738	6.409988	3672
## [152]	{nj,ny}	=> {ct}	0.10557488	0.8631876	6.837287	3672
## [153]	{nj,va}	=> {ny}	0.10554613	0.9095639	5.479914	3671
## [154]	{nj,ny}	=> {va}	0.10554613	0.8629525	5.323581	3671
## [155]	{ny,va}	=> {nj}	0.10554613	0.8977745	6.475632	3671
## [156]	{oh,va}	=> {pa}	0.10554613	0.9454030	6.006953	3671
## [157]	{oh,pa}	=> {va}	0.10554613	0.8728008	5.384335	3671
## [158]	{pa,va}	=> {oh}	0.10554613	0.8575099	6.250011	3671
## [159]	{la,ms}	=> {ga}	0.10545988	0.8996811	5.266208	3668
## [160]	{ga,ms}	=> {la}	0.10545988	0.8694003	5.867018	3668
## [161]	{ga,la}	=> {ms}	0.10545988	0.9195287	6.642186	3668
## [162]	{mi,on}	=> {ny}	0.10531612	0.9141502	5.507545	3663
## [163]	{mi,ny}	=> {on}	0.10531612	0.8966952	6.153898	3663
## [164]	{ny,on}	=> {mi}	0.10531612	0.8947240	6.573594	3663
## [165]	{ma,nj}	=> {pa}	0.10517236	0.9481597	6.024469	3658
## [166]	{nj,pa}	=> {ma}	0.10517236	0.8609084	6.033298	3658
## [167]	{ma,pa}	=> {nj}	0.10517236	0.8846433	6.380916	3658
## [168]	{ct,ma,pa}	=> {ny}	0.10517236	0.9851872	5.935527	3658
## [169]	{ct,ma,ny}	=> {pa}	0.10517236	0.9430266	5.991854	3658
## [170]	{ct,ny,pa}	=> {ma}	0.10517236	0.9523562	6.674169	3658
## [171]	{ma,ny,pa}	=> {ct}	0.10517236	0.9214106	7.298470	3658
## [172]	{md,tn}	=> {va}	0.10514361	0.9759808	6.020856	3657
## [173]	{tn,va}	=> {md}	0.10514361	0.8649480	5.889537	3657
## [174]	{md,va}	=> {tn}	0.10514361	0.8208754	5.826708	3657
## [175]	{ga,tn}	=> {va}	0.10488485	0.9168133	5.655850	3648
## [176]	{ga,va}	=> {tn}	0.10488485	0.8581510	6.091296	3648
## [177]	{tn,va}	=> {ga}	0.10488485	0.8628193	5.050441	3648
## [178]	{ky,tn}	=> {va}	0.10485610	0.9149523	5.644370	3647
## [179]	{ky,va}	=> {tn}	0.10485610	0.9261046	6.573642	3647
## [180]	{tn,va}	=> {ky}	0.10485610	0.8625828	6.586497	3647
## [181]	{fl,sc}	=> {al}	0.10459734	0.9301969	5.674005	3638
## [182]	{al,fl}	=> {sc}	0.10459734	0.8743091	5.598185	3638
## [183]	{al,sc}	=> {fl}	0.10459734	0.8088039	4.248755	3638
## [184]	{al,ga,ms}	=> {nc}	0.10451108	0.8977525	5.269107	3635
## [185]	{al,ms,nc}	=> {ga}	0.10451108	0.9737477	5.699750	3635
## [186]	{ga,ms,nc}	=> {al}	0.10451108	0.9693333	5.912729	3635
## [187]	{al,ga,nc}	=> {ms}	0.10451108	0.8560999	6.184010	3635
## [188]	{on,pa}	=> {ny}	0.10430982	0.9651503	5.814809	3628
## [189]	{ny,on}	=> {pa}	0.10430982	0.8861749	5.630626	3628
## [190]	{ny,pa}	=> {on}	0.10430982	0.7798796	5.352209	3628
## [191]	{il,oh}	=> {ny}	0.10419482	0.8871481	5.344864	3624
## [192]	{ny,oh}	=> {il}	0.10419482	0.8839024	5.949876	3624
## [193]	{il,ny}	=> {oh}	0.10419482	0.9094103	6.628290	3624
## [194]	{md,oh}	=> {pa}	0.10413732	0.9622742	6.114150	3622
## [195]	{oh,pa}	=> {md}	0.10413732	0.8611507	5.863681	3622
## [196]	{md,pa}	=> {oh}	0.10413732	0.8584973	6.257207	3622
## [197]	{nj,oh}	=> {pa}	0.10393606	0.9741310	6.189486	3615
## [198]	{nj,pa}	=> {oh}	0.10393606	0.8507884	6.201021	3615
## [199]	{oh,pa}	=> {nj}	0.10393606	0.8594864	6.199460	3615
## [200]	{ky,nc}	=> {va}	0.10390731	0.9591295	5.916900	3614
## [201]	{ky,va}	=> {nc}	0.10390731	0.9177247	5.386329	3614
## [202]	{md,nc}	=> {pa}	0.10387855	0.8680923	5.515732	3613

## [203]	{md,pa}	=> {nc}	0.10387855	0.8563641	5.026189	3613
## [204]	{nc,pa}	=> {md}	0.10387855	0.9149152	6.229770	3613
## [205]	{nc,nj}	=> {va}	0.10384980	0.9598724	5.921483	3612
## [206]	{nj,va}	=> {nc}	0.10384980	0.8949455	5.252632	3612
## [207]	{ga,ms,sc}	=> {nc}	0.10384980	0.9438202	5.539489	3612
## [208]	{ms,nc,sc}	=> {ga}	0.10384980	0.9767442	5.717290	3612
## [209]	{ga,ms,nc}	=> {sc}	0.10384980	0.9632000	6.167353	3612
## [210]	{ga,nc,sc}	=> {ms}	0.10384980	0.8122330	5.867139	3612
## [211]	{al,nc,sc}	=> {va}	0.10373480	0.8698168	5.365927	3608
## [212]	{al,sc,va}	=> {nc}	0.10373480	0.9799022	5.751262	3608
## [213]	{nc,sc,va}	=> {al}	0.10373480	0.8869223	5.410040	3608
## [214]	{al,nc,va}	=> {sc}	0.10373480	0.9337474	5.978768	3608
## [215]	{al,tn}	=> {ga}	0.10359104	0.9286082	5.435531	3603
## [216]	{ga,tn}	=> {al}	0.10359104	0.9055039	5.523383	3603
## [217]	{fl,ms}	=> {al}	0.10347604	0.9548952	5.824660	3599
## [218]	{al,fl}	=> {ms}	0.10347604	0.8649363	6.247840	3599
## [219]	{al,ms}	=> {fl}	0.10347604	0.8286898	4.353219	3599
## [220]	{ma,nj,pa}	=> {ny}	0.10341853	0.9833242	5.924303	3597
## [221]	{ma,nj,ny}	=> {pa}	0.10341853	0.9566489	6.078408	3597
## [222]	{nj,ny,pa}	=> {ma}	0.10341853	0.9026349	6.325719	3597
## [223]	{ma,ny,pa}	=> {nj}	0.10341853	0.9060453	6.535289	3597
## [224]	{la,sc}	=> {ga}	0.10338978	0.9503171	5.562602	3596
## [225]	{ga,la}	=> {sc}	0.10338978	0.9014791	5.772155	3596
## [226]	{in,oh}	=> {pa}	0.10333228	0.9203585	5.847824	3594
## [227]	{in,pa}	=> {oh}	0.10333228	0.9505422	6.928082	3594
## [228]	{oh,pa}	=> {in}	0.10333228	0.8544936	6.693726	3594
## [229]	{ct,nj}	=> {pa}	0.10307352	0.9567654	6.079148	3585
## [230]	{ct,pa}	=> {nj}	0.10307352	0.9098985	6.563081	3585
## [231]	{nj,pa}	=> {ct}	0.10307352	0.8437279	6.683148	3585
## [232]	{il,in}	=> {pa}	0.10298726	0.8664731	5.505444	3582
## [233]	{in,pa}	=> {il}	0.10298726	0.9473684	6.377089	3582
## [234]	{il,pa}	=> {in}	0.10298726	0.8844444	6.928347	3582
## [235]	{sc,tn}	=> {nc}	0.10292976	0.9688769	5.686552	3580
## [236]	{nc,tn}	=> {sc}	0.10292976	0.8509627	5.448699	3580
## [237]	{al,ga,sc}	=> {va}	0.10290101	0.8280888	5.108506	3579
## [238]	{al,sc,va}	=> {ga}	0.10290101	0.9720261	5.689673	3579
## [239]	{ga,sc,va}	=> {al}	0.10290101	0.9219474	5.623685	3579
## [240]	{al,ga,va}	=> {sc}	0.10290101	0.9448258	6.049703	3579
## [241]	{nc,ny}	=> {va}	0.10284351	0.9518361	5.871907	3577
## [242]	{ny,va}	=> {nc}	0.10284351	0.8747860	5.134312	3577
## [243]	{al,ms,sc}	=> {nc}	0.10269975	0.9387648	5.509817	3572
## [244]	{ms,nc,sc}	=> {al}	0.10269975	0.9659275	5.891955	3572
## [245]	{al,ms,nc}	=> {sc}	0.10269975	0.9568711	6.126829	3572
## [246]	{al,nc,sc}	=> {ms}	0.10269975	0.8611379	6.220402	3572
## [247]	{ct,nj}	=> {ma}	0.10241224	0.9506272	6.662052	3562
## [248]	{ct,ma}	=> {nj}	0.10241224	0.8907227	6.424767	3562
## [249]	{ma,nj}	=> {ct}	0.10241224	0.9232763	7.313248	3562
## [250]	{la,sc}	=> {al}	0.10238349	0.9410677	5.740315	3561
## [251]	{al,la}	=> {sc}	0.10238349	0.8704473	5.573459	3561
## [252]	{al,sc}	=> {la}	0.10238349	0.7916852	5.342569	3561
## [253]	{bc,wa}	=> {or}	0.10235473	0.9109519	4.508227	3560
## [254]	{bc,or}	=> {wa}	0.10235473	0.9676543	5.952597	3560
## [255]	{ga,nc,tn}	=> {va}	0.10232598	0.9556928	5.895699	3559
## [256]	{ga,tn,va}	=> {nc}	0.10232598	0.9756031	5.726029	3559

## [257]	{ga,nc,va}	=> {tn}	0.10232598	0.8629971	6.125694	3559
## [258]	{nc,tn,va}	=> {ga}	0.10232598	0.8978305	5.255376	3559
## [259]	{ga,md}	=> {va}	0.10223973	0.9707890	5.988828	3556
## [260]	{ga,va}	=> {md}	0.10223973	0.8365091	5.695893	3556
## [261]	{md,va}	=> {ga}	0.10223973	0.7982043	4.672222	3556
## [262]	{nj,oh}	=> {ny}	0.10223973	0.9582323	5.773130	3556
## [263]	{nj,ny}	=> {oh}	0.10223973	0.8359191	6.092645	3556
## [264]	{ny,oh}	=> {nj}	0.10223973	0.8673171	6.255943	3556
## [265]	{ky,tn}	=> {nc}	0.10221098	0.8918716	5.234591	3555
## [266]	{ky,nc}	=> {tn}	0.10221098	0.9434713	6.696914	3555
## [267]	{nc,tn}	=> {ky}	0.10221098	0.8450202	6.452392	3555
## [268]	{md,pa,va}	=> {ny}	0.10221098	0.9134121	5.503098	3555
## [269]	{md,ny,va}	=> {pa}	0.10221098	0.9582210	6.088397	3555
## [270]	{md,ny,pa}	=> {va}	0.10221098	0.9294118	5.733571	3555
## [271]	{ny,pa,va}	=> {md}	0.10221098	0.9279561	6.318567	3555
## [272]	{ma,oh}	=> {ny}	0.10215347	0.9723591	5.858240	3553
## [273]	{ma,ny}	=> {oh}	0.10215347	0.8126715	5.923204	3553
## [274]	{ny,oh}	=> {ma}	0.10215347	0.8665854	6.073082	3553
## [275]	{ga,md}	=> {nc}	0.10209597	0.9694240	5.689763	3551
## [276]	{md,nc}	=> {ga}	0.10209597	0.8531956	4.994109	3551
## [277]	{md,nj,pa}	=> {ny}	0.10206722	0.9517426	5.734031	3550
## [278]	{md,nj,ny}	=> {pa}	0.10206722	0.9628424	6.117761	3550
## [279]	{nj,ny,pa}	=> {md}	0.10206722	0.8908407	6.065844	3550
## [280]	{md,ny,pa}	=> {nj}	0.10206722	0.9281046	6.694402	3550
## [281]	{al,la,ms}	=> {ga}	0.10203847	0.9421290	5.514673	3549
## [282]	{ga,la,ms}	=> {al}	0.10203847	0.9675573	5.901896	3549
## [283]	{al,ga,ms}	=> {la}	0.10203847	0.8765127	5.915015	3549
## [284]	{al,ga,la}	=> {ms}	0.10203847	0.9431305	6.812673	3549
## [285]	{ma,mi}	=> {ny}	0.10177971	0.9735974	5.865701	3540
## [286]	{ma,ny}	=> {mi}	0.10177971	0.8096981	5.948903	3540
## [287]	{mi,ny}	=> {ma}	0.10177971	0.8665851	6.073080	3540
## [288]	{fl,ms}	=> {ga}	0.10172220	0.9387105	5.494664	3538
## [289]	{fl,ga}	=> {ms}	0.10172220	0.8320790	6.010496	3538
## [290]	{ga,ms}	=> {fl}	0.10172220	0.8385873	4.405212	3538
## [291]	{mi,oh}	=> {ny}	0.10172220	0.9414582	5.672070	3538
## [292]	{mi,ny}	=> {oh}	0.10172220	0.8660955	6.312587	3538
## [293]	{ny,oh}	=> {mi}	0.10172220	0.8629268	6.339978	3538
## [294]	{md,oh}	=> {va}	0.10172220	0.9399575	5.798627	3538
## [295]	{oh,va}	=> {md}	0.10172220	0.9111512	6.204140	3538
## [296]	{md,va}	=> {oh}	0.10172220	0.7941639	5.788310	3538
## [297]	{ma,on}	=> {ny}	0.10169345	0.9682453	5.833456	3537
## [298]	{ma,ny}	=> {on}	0.10169345	0.8090119	5.552139	3537
## [299]	{ny,on}	=> {ma}	0.10169345	0.8639472	6.054594	3537
## [300]	{ct,nj,pa}	=> {ny}	0.10169345	0.9866109	5.944104	3537
## [301]	{ct,nj,ny}	=> {pa}	0.10169345	0.9632353	6.120257	3537
## [302]	{ct,ny,pa}	=> {nj}	0.10169345	0.9208539	6.642103	3537
## [303]	{nj,ny,pa}	=> {ct}	0.10169345	0.8875784	7.030486	3537
## [304]	{il,va}	=> {pa}	0.10163595	0.9057136	5.754772	3535
## [305]	{pa,va}	=> {il}	0.10163595	0.8257416	5.558374	3535
## [306]	{il,pa}	=> {va}	0.10163595	0.8728395	5.384574	3535
## [307]	{ma,md}	=> {ny}	0.10160720	0.9703460	5.846112	3534
## [308]	{ma,ny}	=> {md}	0.10160720	0.8083257	5.503989	3534
## [309]	{md,ny}	=> {ma}	0.10160720	0.8715166	6.107641	3534
## [310]	{al,fl,sc}	=> {ga}	0.10154970	0.9708631	5.682866	3532

## [311]	{fl,ga,sc}	=> {al}	0.10154970	0.9479334	5.782194	3532
## [312]	{al,fl,ga}	=> {sc}	0.10154970	0.9169263	5.871063	3532
## [313]	{al,ga,sc}	=> {fl}	0.10154970	0.8172143	4.292936	3532
## [314]	{md,nc,va}	=> {pa}	0.10154970	0.8772976	5.574221	3532
## [315]	{md,nc,pa}	=> {va}	0.10154970	0.9775810	6.030728	3532
## [316]	{md,pa,va}	=> {nc}	0.10154970	0.9075026	5.326333	3532
## [317]	{nc,pa,va}	=> {md}	0.10154970	0.9416156	6.411576	3532
## [318]	{md,tn}	=> {nc}	0.10152095	0.9423539	5.530883	3531
## [319]	{nc,tn}	=> {md}	0.10152095	0.8393154	5.715002	3531
## [320]	{md,nc}	=> {tn}	0.10152095	0.8483902	6.022012	3531
## [321]	{al,ga,nc,sc}	=> {va}	0.10146344	0.8739475	5.391410	3529
## [322]	{al,ga,sc,va}	=> {nc}	0.10146344	0.9860296	5.787225	3529
## [323]	{al,nc,sc,va}	=> {ga}	0.10146344	0.9781042	5.725251	3529
## [324]	{ga,nc,sc,va}	=> {al}	0.10146344	0.9226144	5.627754	3529
## [325]	{al,ga,nc,va}	=> {sc}	0.10146344	0.9553330	6.116980	3529
## [326]	{md,nj}	=> {nc}	0.10143469	0.8808989	5.170190	3528
## [327]	{nc,nj}	=> {md}	0.10143469	0.9375498	6.383892	3528
## [328]	{md,nc}	=> {nj}	0.10143469	0.8476694	6.114224	3528
## [329]	{md,nj,va}	=> {pa}	0.10143469	0.9373007	5.955473	3528
## [330]	{md,nj,pa}	=> {va}	0.10143469	0.9458445	5.834945	3528
## [331]	{nj,pa,va}	=> {md}	0.10143469	0.9491525	6.462896	3528
## [332]	{md,pa,va}	=> {nj}	0.10143469	0.9064748	6.538387	3528
## [333]	{ma,oh}	=> {pa}	0.10134844	0.9646962	6.129540	3525
## [334]	{ma,pa}	=> {oh}	0.10134844	0.8524788	6.213342	3525
## [335]	{oh,pa}	=> {ma}	0.10134844	0.8380884	5.873374	3525
## [336]	{al,tn}	=> {nc}	0.10131969	0.9082474	5.330704	3524
## [337]	{al,nc}	=> {tn}	0.10131969	0.7874860	5.589704	3524
## [338]	{nc,tn}	=> {al}	0.10131969	0.8376515	5.109498	3524
## [339]	{ct,ma,nj}	=> {ny}	0.10131969	0.9893318	5.960497	3524
## [340]	{ct,nj,ny}	=> {ma}	0.10131969	0.9596950	6.725600	3524
## [341]	{ct,ma,ny}	=> {nj}	0.10131969	0.9084816	6.552861	3524
## [342]	{ma,nj,ny}	=> {ct}	0.10131969	0.9372340	7.423807	3524
## [343]	{fl,sc}	=> {nc}	0.10126218	0.9005369	5.285450	3522
## [344]	{fl,nc}	=> {sc}	0.10126218	0.9529221	6.101543	3522
## [345]	{ma,va}	=> {ny}	0.10123343	0.9641292	5.808657	3521
## [346]	{ma,ny}	=> {va}	0.10123343	0.8053522	4.968243	3521
## [347]	{ny,va}	=> {ma}	0.10123343	0.8610907	6.034575	3521
## [348]	{mi,oh}	=> {pa}	0.10120468	0.9366684	5.951455	3520
## [349]	{mi,pa}	=> {oh}	0.10120468	0.9097958	6.631100	3520
## [350]	{oh,pa}	=> {mi}	0.10120468	0.8368997	6.148755	3520
## [351]	{nj,pa,va}	=> {ny}	0.10117593	0.9467312	5.703838	3519
## [352]	{nj,ny,va}	=> {pa}	0.10117593	0.9585944	6.090769	3519
## [353]	{nj,ny,pa}	=> {va}	0.10117593	0.8830615	5.447634	3519
## [354]	{ny,pa,va}	=> {nj}	0.10117593	0.9185591	6.625551	3519
## [355]	{al,ga,ms,sc}	=> {nc}	0.10117593	0.9462221	5.553586	3519
## [356]	{al,ms,nc,sc}	=> {ga}	0.10117593	0.9851624	5.766566	3519
## [357]	{ga,ms,nc,sc}	=> {al}	0.10117593	0.9742525	5.942735	3519
## [358]	{al,ga,ms,nc}	=> {sc}	0.10117593	0.9680880	6.198651	3519
## [359]	{al,ga,nc,sc}	=> {ms}	0.10117593	0.8714710	6.295043	3519
## [360]	{sc,tn}	=> {ga}	0.10111843	0.9518268	5.571439	3517
## [361]	{ga,tn}	=> {sc}	0.10111843	0.8838904	5.659535	3517
## [362]	{tn,va}	=> {pa}	0.10108968	0.8315989	5.283858	3516
## [363]	{pa,tn}	=> {va}	0.10108968	0.9580381	5.910168	3516
## [364]	{pa,va}	=> {tn}	0.10108968	0.8213034	5.829746	3516

## [365]	{nc,pa}	=> {ny}	0.10106092	0.8900988	5.362641	3515
## [366]	{nc,ny}	=> {pa}	0.10106092	0.9353379	5.943001	3515
## [367]	{ny,pa}	=> {nc}	0.10106092	0.7555890	4.434718	3515
## [368]	{ky,md}	=> {va}	0.10100342	0.9683021	5.973486	3513
## [369]	{ky,va}	=> {md}	0.10100342	0.8920772	6.074263	3513
## [370]	{md,va}	=> {ky}	0.10100342	0.7885522	6.021215	3513
## [371]	{fl,ga}	=> {nc}	0.10097467	0.8259643	4.847766	3512
## [372]	{fl,nc}	=> {ga}	0.10097467	0.9502165	5.562013	3512
## [373]	{in,pa}	=> {ny}	0.10077341	0.9270034	5.584983	3505
## [374]	{in,ny}	=> {pa}	0.10077341	0.9532227	6.056639	3505
## [375]	{ny,pa}	=> {in}	0.10077341	0.7534394	5.902112	3505
## [376]	{md,va}	=> {il}	0.10077341	0.7867565	5.295950	3505
## [377]	{il,md}	=> {va}	0.10077341	0.9379181	5.786046	3505
## [378]	{il,va}	=> {md}	0.10077341	0.8980272	6.114777	3505
## [379]	{la,ms}	=> {sc}	0.10071591	0.8592102	5.501508	3503
## [380]	{ms,sc}	=> {la}	0.10071591	0.8848194	5.971072	3503
## [381]	{la,sc}	=> {ms}	0.10071591	0.9257400	6.687053	3503
## [382]	{al,tn}	=> {va}	0.10068716	0.9025773	5.568028	3502
## [383]	{al,va}	=> {tn}	0.10068716	0.8653323	6.142270	3502
## [384]	{tn,va}	=> {al}	0.10068716	0.8282876	5.052380	3502
## [385]	{oh,va}	=> {il}	0.10068716	0.9018800	6.070890	3502
## [386]	{il,oh}	=> {va}	0.10068716	0.8572827	5.288604	3502
## [387]	{il,va}	=> {oh}	0.10068716	0.8972585	6.539721	3502
## [388]	{oh,va}	=> {ny}	0.10065841	0.9016225	5.432068	3501
## [389]	{ny,oh}	=> {va}	0.10065841	0.8539024	5.267751	3501
## [390]	{ny,va}	=> {oh}	0.10065841	0.8561996	6.240460	3501
## [391]	{il,nj}	=> {pa}	0.10060090	0.9583676	6.089328	3499
## [392]	{nj,pa}	=> {il}	0.10060090	0.8234879	5.543203	3499
## [393]	{il,pa}	=> {nj}	0.10060090	0.8639506	6.231660	3499
## [394]	{va,wv}	=> {pa}	0.10045715	0.9292553	5.904353	3494
## [395]	{pa,wv}	=> {va}	0.10045715	0.9425411	5.814566	3494
## [396]	{pa,va}	=> {wv}	0.10045715	0.8161644	6.988433	3494
## [397]	{mi,wi}	=> {on}	0.10039964	0.9150943	6.280169	3492
## [398]	{on,wi}	=> {mi}	0.10039964	0.9522771	6.996440	3492
## [399]	{mi,on}	=> {wi}	0.10039964	0.8714749	7.014758	3492
## [400]	{fl,la}	=> {al}	0.10037089	0.9079324	5.538196	3491
## [401]	{al,fl}	=> {la}	0.10037089	0.8389810	5.661738	3491
## [402]	{al,la}	=> {fl}	0.10037089	0.8533366	4.482691	3491
## [403]	{il,md}	=> {pa}	0.10037089	0.9341718	5.935592	3491
## [404]	{md,pa}	=> {il}	0.10037089	0.8274473	5.569855	3491
## [405]	{il,pa}	=> {md}	0.10037089	0.8619753	5.869296	3491
## [406]	{nj,oh,pa}	=> {ny}	0.10037089	0.9656985	5.818112	3491
## [407]	{nj,ny,oh}	=> {pa}	0.10037089	0.9817210	6.237713	3491
## [408]	{nj,ny,pa}	=> {oh}	0.10037089	0.8760351	6.385033	3491
## [409]	{ny,oh,pa}	=> {nj}	0.10037089	0.8981219	6.478138	3491
## [410]	{il,in}	=> {ny}	0.10031339	0.8439768	5.084766	3489
## [411]	{in,ny}	=> {il}	0.10031339	0.9488714	6.387206	3489
## [412]	{il,ny}	=> {in}	0.10031339	0.8755332	6.858541	3489
## [413]	{md,nc,tn}	=> {va}	0.10031339	0.9881054	6.095653	3489
## [414]	{md,tn,va}	=> {nc}	0.10031339	0.9540607	5.599593	3489
## [415]	{nc,tn,va}	=> {md}	0.10031339	0.8801715	5.993196	3489
## [416]	{md,nc,va}	=> {tn}	0.10031339	0.8666170	6.151389	3489
## [417]	{mi,wi}	=> {ny}	0.10028464	0.9140461	5.506918	3488
## [418]	{ny,wi}	=> {mi}	0.10028464	0.9404152	6.909291	3488

## [419]	{mi,ny}	=> {wi}	0.10028464	0.8538556	6.872935	3488
## [420]	{la,ms}	=> {tx}	0.10025589	0.8552857	3.506742	3487
## [421]	{ms,tx}	=> {la}	0.10025589	0.9527322	6.429371	3487
## [422]	{la,tx}	=> {ms}	0.10025589	0.8294481	5.991492	3487
## [423]	{ga,la}	=> {nc}	0.10019838	0.8736525	5.127659	3485
## [424]	{la,nc}	=> {ga}	0.10019838	0.9416374	5.511796	3485
## [425]	{md,wv}	=> {va}	0.10019838	0.9643055	5.948831	3485
## [426]	{va,wv}	=> {md}	0.10019838	0.9268617	6.311115	3485
## [427]	{md,va}	=> {wv}	0.10019838	0.7822671	6.698186	3485
## [428]	{ga,md,nc}	=> {va}	0.10016963	0.9811321	6.052635	3484
## [429]	{ga,md,va}	=> {nc}	0.10016963	0.9797525	5.750384	3484
## [430]	{ga,nc,va}	=> {md}	0.10016963	0.8448109	5.752421	3484
## [431]	{md,nc,va}	=> {ga}	0.10016963	0.8653751	5.065401	3484
## [432]	{la,sc}	=> {nc}	0.10014088	0.9204545	5.402351	3483
## [433]	{la,nc}	=> {sc}	0.10014088	0.9410970	6.025827	3483
## [434]	{il,oh,pa}	=> {ny}	0.10014088	0.9357872	5.637903	3483
## [435]	{il,ny,oh}	=> {pa}	0.10014088	0.9610927	6.106643	3483
## [436]	{ny,oh,pa}	=> {il}	0.10014088	0.8960638	6.031739	3483
## [437]	{il,ny,pa}	=> {oh}	0.10014088	0.9378029	6.835231	3483
## [438]	{sc,tn}	=> {va}	0.10005463	0.9418133	5.810076	3480
## [439]	{sc,va}	=> {tn}	0.10005463	0.8347325	5.925068	3480
## [440]	{tn,va}	=> {sc}	0.10005463	0.8230842	5.270194	3480
## [441]	{in,oh}	=> {ny}	0.09999712	0.8906530	5.365980	3478
## [442]	{in,ny}	=> {oh}	0.09999712	0.9458798	6.894100	3478
## [443]	{ny,oh}	=> {in}	0.09999712	0.8482927	6.645150	3478
## [444]	{mi,oh}	=> {il}	0.09996837	0.9252262	6.228042	3477
## [445]	{il,mi}	=> {oh}	0.09996837	0.9176564	6.688392	3477
## [446]	{il,oh}	=> {mi}	0.09996837	0.8511628	6.253547	3477
## [447]	{in,va}	=> {il}	0.09993962	0.9515467	6.405215	3476
## [448]	{il,in}	=> {va}	0.09993962	0.8408321	5.187120	3476
## [449]	{il,va}	=> {in}	0.09993962	0.8905970	6.976544	3476
## [450]	{md,nj,va}	=> {ny}	0.09993962	0.9234857	5.563789	3476
## [451]	{md,nj,ny}	=> {va}	0.09993962	0.9427719	5.815990	3476
## [452]	{nj,ny,va}	=> {md}	0.09993962	0.9468810	6.447429	3476
## [453]	{md,ny,va}	=> {nj}	0.09993962	0.9369272	6.758039	3476
## [454]	{ct,oh}	=> {ny}	0.09988212	0.9788673	5.897451	3474
## [455]	{ct,ny}	=> {oh}	0.09988212	0.8407551	6.127892	3474
## [456]	{ny,oh}	=> {ct}	0.09988212	0.8473171	6.711577	3474
## [457]	{il,mi}	=> {ny}	0.09988212	0.9168646	5.523899	3474
## [458]	{mi,ny}	=> {il}	0.09988212	0.8504284	5.724550	3474
## [459]	{il,ny}	=> {mi}	0.09988212	0.8717691	6.404943	3474
## [460]	{ma,va}	=> {pa}	0.09979587	0.9504381	6.038946	3471
## [461]	{ma,pa}	=> {va}	0.09979587	0.8394196	5.178406	3471
## [462]	{pa,va}	=> {ma}	0.09979587	0.8107919	5.682078	3471
## [463]	{md,oh}	=> {ny}	0.09970961	0.9213603	5.550984	3468
## [464]	{ny,oh}	=> {md}	0.09970961	0.8458537	5.759522	3468
## [465]	{md,ny}	=> {oh}	0.09970961	0.8552404	6.233470	3468
## [466]	{al,la,sc}	=> {ga}	0.09968086	0.9736029	5.698903	3467
## [467]	{ga,la,sc}	=> {al}	0.09968086	0.9641268	5.880971	3467
## [468]	{al,ga,la}	=> {sc}	0.09968086	0.9213394	5.899320	3467
## [469]	{al,ga,sc}	=> {la}	0.09968086	0.8021749	5.413358	3467
## [470]	{ma,md}	=> {pa}	0.09965211	0.9516749	6.046804	3466
## [471]	{ma,pa}	=> {md}	0.09965211	0.8382104	5.707478	3466
## [472]	{md,pa}	=> {ma}	0.09965211	0.8215217	5.757273	3466

## [473]	{al,la}	=> {tx}	0.09956585	0.8464923	3.470688	3463
## [474]	{la,tx}	=> {al}	0.09956585	0.8237393	5.024636	3463
## [475]	{al,tx}	=> {la}	0.09956585	0.9244527	6.238531	3463
## [476]	{md,nc,nj}	=> {va}	0.09947960	0.9807256	6.050127	3460
## [477]	{md,nj,va}	=> {nc}	0.09947960	0.9192349	5.395192	3460
## [478]	{nc,nj,va}	=> {md}	0.09947960	0.9579181	6.522582	3460
## [479]	{md,nc,va}	=> {nj}	0.09947960	0.8594138	6.198936	3460
## [480]	{ma,oh,pa}	=> {ny}	0.09947960	0.9815603	5.913675	3460
## [481]	{ma,ny,oh}	=> {pa}	0.09947960	0.9738249	6.187542	3460
## [482]	{ma,ny,pa}	=> {oh}	0.09947960	0.8715365	6.352245	3460
## [483]	{ny,oh,pa}	=> {ma}	0.09947960	0.8901466	6.238201	3460
## [484]	{al,la}	=> {nc}	0.09945085	0.8455145	4.962511	3459
## [485]	{la,nc}	=> {al}	0.09945085	0.9346123	5.700938	3459
## [486]	{al,nc}	=> {la}	0.09945085	0.7729609	5.216211	3459
## [487]	{fl,la}	=> {ga}	0.09936460	0.8988296	5.261224	3456
## [488]	{fl,ga}	=> {la}	0.09936460	0.8127940	5.485019	3456
## [489]	{ga,la}	=> {fl}	0.09936460	0.8663826	4.551224	3456
## [490]	{ct,oh}	=> {pa}	0.09936460	0.9737954	6.187355	3456
## [491]	{ct,pa}	=> {oh}	0.09936460	0.8771574	6.393213	3456
## [492]	{oh,pa}	=> {ct}	0.09936460	0.8216833	6.508533	3456
## [493]	{md,wv}	=> {pa}	0.09924959	0.9551743	6.069039	3452
## [494]	{pa,wv}	=> {md}	0.09924959	0.9312112	6.340732	3452
## [495]	{md,pa}	=> {wv}	0.09924959	0.8182034	7.005891	3452
## [496]	{al,fl,ms}	=> {ga}	0.09924959	0.9591553	5.614335	3452
## [497]	{fl,ga,ms}	=> {al}	0.09924959	0.9756925	5.951519	3452
## [498]	{al,fl,ga}	=> {ms}	0.09924959	0.8961578	6.473368	3452
## [499]	{al,ga,ms}	=> {fl}	0.09924959	0.8525562	4.478592	3452
## [500]	{md,sc}	=> {nc}	0.09922084	0.9756856	5.726514	3451
## [501]	{md,nc}	=> {sc}	0.09922084	0.8291687	5.309152	3451
## [502]	{ky,nc,tn}	=> {va}	0.09916334	0.9701828	5.985089	3449
## [503]	{ky,tn,va}	=> {nc}	0.09916334	0.9457088	5.550573	3449
## [504]	{ky,nc,va}	=> {tn}	0.09916334	0.9543442	6.774091	3449
## [505]	{nc,tn,va}	=> {ky}	0.09916334	0.8700807	6.643749	3449
## [506]	{ct,md}	=> {ny}	0.09913458	0.9792673	5.899860	3448
## [507]	{ct,ny}	=> {md}	0.09913458	0.8344627	5.681959	3448
## [508]	{md,ny}	=> {ct}	0.09913458	0.8503083	6.735270	3448
## [509]	{il,nj}	=> {ny}	0.09913458	0.9443988	5.689786	3448
## [510]	{nj,ny}	=> {il}	0.09913458	0.8105313	5.455988	3448
## [511]	{il,ny}	=> {nj}	0.09913458	0.8652447	6.240994	3448
## [512]	{md,nc}	=> {ny}	0.09913458	0.8284479	4.991208	3448
## [513]	{md,ny}	=> {nc}	0.09913458	0.8503083	4.990647	3448
## [514]	{nc,ny}	=> {md}	0.09913458	0.9175093	6.247434	3448
## [515]	{il,nc}	=> {va}	0.09910583	0.9543189	5.887224	3447
## [516]	{il,va}	=> {nc}	0.09910583	0.8831668	5.183501	3447
## [517]	{al,fl}	=> {nc}	0.09901958	0.8276857	4.857870	3444
## [518]	{fl,nc}	=> {al}	0.09901958	0.9318182	5.683895	3444
## [519]	{al,nc}	=> {fl}	0.09901958	0.7696089	4.042859	3444
## [520]	{nc,nj}	=> {pa}	0.09890457	0.9141642	5.808467	3440
## [521]	{nj,pa}	=> {nc}	0.09890457	0.8096023	4.751734	3440
## [522]	{nc,pa}	=> {nj}	0.09890457	0.8711066	6.283276	3440
## [523]	{ct,ma,nj}	=> {pa}	0.09887582	0.9654688	6.134449	3439
## [524]	{ct,nj,pa}	=> {ma}	0.09887582	0.9592748	6.722655	3439
## [525]	{ct,ma,pa}	=> {nj}	0.09887582	0.9262052	6.680702	3439
## [526]	{ma,nj,pa}	=> {ct}	0.09887582	0.9401312	7.446756	3439

## [527]	{il,in,oh}	=> {pa}	0.09887582	0.9234694	5.867590	3439
## [528]	{in,oh,pa}	=> {il}	0.09887582	0.9568726	6.441065	3439
## [529]	{il,in,pa}	=> {oh}	0.09887582	0.9600782	6.997586	3439
## [530]	{il,oh,pa}	=> {in}	0.09887582	0.9239656	7.237939	3439
## [531]	{ct,va}	=> {ny}	0.09881832	0.9747589	5.872699	3437
## [532]	{ct,ny}	=> {va}	0.09881832	0.8318006	5.131404	3437
## [533]	{ny,va}	=> {ct}	0.09881832	0.8405478	6.657958	3437
## [534]	{ky,va}	=> {pa}	0.09878957	0.8725241	5.543891	3436
## [535]	{ky,pa}	=> {va}	0.09878957	0.9400821	5.799396	3436
## [536]	{pa,va}	=> {ky}	0.09878957	0.8026162	6.128605	3436
## [537]	{mi,on}	=> {pa}	0.09878957	0.8574994	5.448426	3436
## [538]	{mi,pa}	=> {on}	0.09878957	0.8880848	6.094806	3436
## [539]	{on,pa}	=> {mi}	0.09878957	0.9140729	6.715752	3436
## [540]	{ga,sc,tn}	=> {nc}	0.09876082	0.9766847	5.732378	3435
## [541]	{ga,nc,sc}	=> {tn}	0.09876082	0.7724309	5.482840	3435
## [542]	{nc,sc,tn}	=> {ga}	0.09876082	0.9594972	5.616337	3435
## [543]	{ga,nc,tn}	=> {sc}	0.09876082	0.9223953	5.906081	3435
## [544]	{md,sc}	=> {va}	0.09873207	0.9708793	5.989385	3434
## [545]	{sc,va}	=> {md}	0.09873207	0.8236987	5.608666	3434
## [546]	{md,va}	=> {sc}	0.09873207	0.7708193	4.935542	3434
## [547]	{fl,ms}	=> {la}	0.09867456	0.9105864	6.144956	3432
## [548]	{fl,la}	=> {ms}	0.09867456	0.8925878	6.447580	3432
## [549]	{la,ms}	=> {fl}	0.09867456	0.8417954	4.422064	3432
## [550]	{il,mi}	=> {pa}	0.09867456	0.9057799	5.755194	3432
## [551]	{mi,pa}	=> {il}	0.09867456	0.8870509	5.971070	3432
## [552]	{il,pa}	=> {mi}	0.09867456	0.8474074	6.225956	3432
## [553]	{md,oh,va}	=> {pa}	0.09861706	0.9694743	6.159899	3430
## [554]	{md,oh,pa}	=> {va}	0.09861706	0.9469906	5.842015	3430
## [555]	{oh,pa,va}	=> {md}	0.09861706	0.9343503	6.362106	3430
## [556]	{md,pa,va}	=> {oh}	0.09861706	0.8812950	6.423370	3430
## [557]	{ct,mi}	=> {ny}	0.09853081	0.9797027	5.902484	3427
## [558]	{ct,ny}	=> {mi}	0.09853081	0.8293804	6.093511	3427
## [559]	{mi,ny}	=> {ct}	0.09853081	0.8389229	6.645087	3427
## [560]	{ma,mi}	=> {pa}	0.09853081	0.9425193	5.988630	3427
## [561]	{ma,pa}	=> {mi}	0.09853081	0.8287787	6.089090	3427
## [562]	{mi,pa}	=> {ma}	0.09853081	0.8857586	6.207449	3427
## [563]	{nc,sc,tn}	=> {va}	0.09850206	0.9569832	5.903660	3426
## [564]	{sc,tn,va}	=> {nc}	0.09850206	0.9844828	5.778146	3426
## [565]	{nc,sc,va}	=> {tn}	0.09850206	0.8421829	5.977952	3426
## [566]	{nc,tn,va}	=> {sc}	0.09850206	0.8642785	5.533960	3426
## [567]	{oh,pa,va}	=> {ny}	0.09850206	0.9332607	5.622681	3426
## [568]	{ny,oh,va}	=> {pa}	0.09850206	0.9785775	6.217739	3426
## [569]	{ny,oh,pa}	=> {va}	0.09850206	0.8813995	5.437382	3426
## [570]	{ny,pa,va}	=> {oh}	0.09850206	0.8942835	6.518037	3426
## [571]	{in,mo}	=> {il}	0.09847330	0.9816566	6.607896	3425
## [572]	{il,mo}	=> {in}	0.09847330	0.8607690	6.742885	3425
## [573]	{il,in}	=> {mo}	0.09847330	0.8284954	6.213001	3425
## [574]	{il,ma}	=> {ny}	0.09844455	0.9628796	5.801129	3424
## [575]	{ma,ny}	=> {il}	0.09844455	0.7831656	5.271779	3424
## [576]	{il,ny}	=> {ma}	0.09844455	0.8592221	6.021480	3424
## [577]	{ms,nc}	=> {va}	0.09838705	0.8747444	5.396326	3422
## [578]	{ms,va}	=> {nc}	0.09838705	0.9596186	5.632213	3422
## [579]	{ga,ky}	=> {tn}	0.09827205	0.9601124	6.815034	3418
## [580]	{ky,tn}	=> {ga}	0.09827205	0.8575013	5.019312	3418

## [581]	{ga,tn}	=> {ky}	0.09827205	0.8590098	6.559214	3418
## [582]	{in,oh}	=> {va}	0.09827205	0.8752881	5.399680	3418
## [583]	{in,va}	=> {oh}	0.09827205	0.9356693	6.819680	3418
## [584]	{oh,va}	=> {in}	0.09827205	0.8802472	6.895468	3418
## [585]	{in,mi}	=> {il}	0.09821454	0.9611705	6.469996	3416
## [586]	{il,in}	=> {mi}	0.09821454	0.8263183	6.071014	3416
## [587]	{il,mi}	=> {in}	0.09821454	0.9015571	7.062401	3416
## [588]	{oh,on}	=> {ny}	0.09821454	0.9582048	5.772964	3416
## [589]	{ny,oh}	=> {on}	0.09821454	0.8331707	5.717938	3416
## [590]	{ny,on}	=> {oh}	0.09821454	0.8343918	6.081513	3416
## [591]	{fl,ga,sc}	=> {nc}	0.09815704	0.9162641	5.377756	3414
## [592]	{fl,nc,sc}	=> {ga}	0.09815704	0.9693356	5.673925	3414
## [593]	{fl,ga,nc}	=> {sc}	0.09815704	0.9720957	6.224311	3414
## [594]	{ga,nc,sc}	=> {fl}	0.09815704	0.7677086	4.032876	3414
## [595]	{md,oh,pa}	=> {ny}	0.09809954	0.9420210	5.675460	3412
## [596]	{md,ny,oh}	=> {pa}	0.09809954	0.9838524	6.251255	3412
## [597]	{ny,oh,pa}	=> {md}	0.09809954	0.8777978	5.977033	3412
## [598]	{md,ny,pa}	=> {oh}	0.09809954	0.8920261	6.501585	3412
## [599]	{ct,ma,nj,pa}	=> {ny}	0.09809954	0.9921489	5.977469	3412
## [600]	{ct,ma,nj,ny}	=> {pa}	0.09809954	0.9682179	6.151916	3412
## [601]	{ct,nj,ny,pa}	=> {ma}	0.09809954	0.9646593	6.760390	3412
## [602]	{ct,ma,ny,pa}	=> {nj}	0.09809954	0.9327501	6.727910	3412
## [603]	{ma,nj,ny,pa}	=> {ct}	0.09809954	0.9485683	7.513585	3412
## [604]	{oh,wv}	=> {pa}	0.09807079	0.9589542	6.093055	3411
## [605]	{pa,wv}	=> {oh}	0.09807079	0.9201511	6.706575	3411
## [606]	{oh,pa}	=> {wv}	0.09807079	0.8109843	6.944078	3411
## [607]	{nc,oh}	=> {va}	0.09807079	0.9608451	5.927484	3411
## [608]	{oh,va}	=> {nc}	0.09807079	0.8784445	5.155784	3411
## [609]	{md,oh}	=> {il}	0.09804203	0.9059511	6.098294	3410
## [610]	{il,oh}	=> {md}	0.09804203	0.8347613	5.683992	3410
## [611]	{il,md}	=> {oh}	0.09804203	0.9124967	6.650785	3410
## [612]	{mi,oh,pa}	=> {ny}	0.09804203	0.9687500	5.836496	3410
## [613]	{mi,ny,oh}	=> {pa}	0.09804203	0.9638214	6.123981	3410
## [614]	{mi,ny,pa}	=> {oh}	0.09804203	0.9198813	6.704608	3410
## [615]	{ny,oh,pa}	=> {mi}	0.09804203	0.8772833	6.445456	3410
## [616]	{la,ms}	=> {nc}	0.09798453	0.8359088	4.906133	3408
## [617]	{ms,nc}	=> {la}	0.09798453	0.8711656	5.878931	3408
## [618]	{la,nc}	=> {ms}	0.09798453	0.9208322	6.651602	3408
## [619]	{nc,wv}	=> {va}	0.09798453	0.9779053	6.032729	3408
## [620]	{va,wv}	=> {nc}	0.09798453	0.9063830	5.319761	3408
## [621]	{in,ky}	=> {il}	0.09792703	0.9564729	6.438375	3406
## [622]	{il,ky}	=> {in}	0.09792703	0.9046481	7.086614	3406
## [623]	{il,in}	=> {ky}	0.09792703	0.8238994	6.291118	3406
## [624]	{mi,nj}	=> {ny}	0.09792703	0.9795801	5.901745	3406
## [625]	{nj,ny}	=> {mi}	0.09792703	0.8006582	5.882487	3406
## [626]	{mi,ny}	=> {nj}	0.09792703	0.8337821	6.014056	3406
## [627]	{la,ms,sc}	=> {ga}	0.09786953	0.9717385	5.687990	3404
## [628]	{ga,la,ms}	=> {sc}	0.09786953	0.9280262	5.942135	3404
## [629]	{ga,ms,sc}	=> {la}	0.09786953	0.8894696	6.002453	3404
## [630]	{ga,la,sc}	=> {ms}	0.09786953	0.9466073	6.837788	3404
## [631]	{pa,wv}	=> {ny}	0.09784078	0.9179930	5.530697	3403
## [632]	{ny,wv}	=> {pa}	0.09784078	0.9770313	6.207915	3403
## [633]	{ma,md,pa}	=> {ny}	0.09784078	0.9818234	5.915261	3403
## [634]	{ma,md,ny}	=> {pa}	0.09784078	0.9629315	6.118327	3403

## [635]	{ma,ny,pa}	=> {md}	0.09784078	0.8571788	5.836636	3403
## [636]	{md,ny,pa}	=> {ma}	0.09784078	0.8896732	6.234883	3403
## [637]	{ct,oh,pa}	=> {ny}	0.09781202	0.9843750	5.930633	3402
## [638]	{ct,ny,oh}	=> {pa}	0.09781202	0.9792746	6.222168	3402
## [639]	{ct,ny,pa}	=> {oh}	0.09781202	0.8857068	6.455526	3402
## [640]	{ny,oh,pa}	=> {ct}	0.09781202	0.8752251	6.932636	3402
## [641]	{md,tn}	=> {pa}	0.09772577	0.9071257	5.763745	3399
## [642]	{pa,tn}	=> {md}	0.09772577	0.9261580	6.306324	3399
## [643]	{md,pa}	=> {tn}	0.09772577	0.8056411	5.718572	3399
## [644]	{ct,md}	=> {pa}	0.09772577	0.9653508	6.133698	3399
## [645]	{ct,pa}	=> {md}	0.09772577	0.8626904	5.874165	3399
## [646]	{md,pa}	=> {ct}	0.09772577	0.8056411	6.381463	3399
## [647]	{ct,on}	=> {ny}	0.09766827	0.9789625	5.898025	3397
## [648]	{ct,ny}	=> {on}	0.09766827	0.8221200	5.642099	3397
## [649]	{ny,on}	=> {ct}	0.09766827	0.8297509	6.572436	3397
## [650]	{tn,va}	=> {il}	0.09763952	0.8032167	5.406750	3396
## [651]	{il,tn}	=> {va}	0.09763952	0.9190798	5.669833	3396
## [652]	{il,va}	=> {tn}	0.09763952	0.8700999	6.176111	3396
## [653]	{id,or}	=> {ca}	0.09761076	0.8085258	2.408474	3395
## [654]	{ca,id}	=> {or}	0.09761076	0.9525814	4.714248	3395
## [655]	{ky,tn}	=> {il}	0.09755326	0.8512293	5.729941	3393
## [656]	{il,ky}	=> {tn}	0.09755326	0.9011952	6.396831	3393
## [657]	{il,tn}	=> {ky}	0.09755326	0.9182679	7.011696	3393
## [658]	{al,ms}	=> {va}	0.09749576	0.7807967	4.816759	3391
## [659]	{ms,va}	=> {al}	0.09749576	0.9509254	5.800445	3391
## [660]	{al,va}	=> {ms}	0.09749576	0.8379046	6.052577	3391
## [661]	{in,va}	=> {pa}	0.09746701	0.9280044	5.896405	3390
## [662]	{in,pa}	=> {va}	0.09746701	0.8965882	5.531081	3390
## [663]	{pa,va}	=> {in}	0.09746701	0.7918711	6.203168	3390
## [664]	{la,ms,sc}	=> {al}	0.09743826	0.9674565	5.901281	3389
## [665]	{al,la,ms}	=> {sc}	0.09743826	0.8996549	5.760474	3389
## [666]	{al,ms,sc}	=> {la}	0.09743826	0.8906702	6.010555	3389
## [667]	{al,la,sc}	=> {ms}	0.09743826	0.9516990	6.874567	3389
## [668]	{md,nc,sc}	=> {va}	0.09743826	0.9820342	6.058200	3389
## [669]	{md,sc,va}	=> {nc}	0.09743826	0.9868957	5.792309	3389
## [670]	{nc,sc,va}	=> {md}	0.09743826	0.8330875	5.672595	3389
## [671]	{md,nc,va}	=> {sc}	0.09743826	0.8417784	5.389892	3389
## [672]	{fl,ms}	=> {sc}	0.09735200	0.8983815	5.752321	3386
## [673]	{fl,sc}	=> {ms}	0.09735200	0.8657632	6.253813	3386
## [674]	{ms,sc}	=> {fl}	0.09735200	0.8552665	4.492829	3386
## [675]	{ct,va}	=> {pa}	0.09735200	0.9602950	6.101574	3386
## [676]	{ct,pa}	=> {va}	0.09735200	0.8593909	5.301609	3386
## [677]	{pa,va}	=> {ct}	0.09735200	0.7909367	6.264990	3386
## [678]	{ma,nj}	=> {md}	0.09735200	0.8776568	5.976073	3386
## [679]	{md,nj}	=> {ma}	0.09735200	0.8454432	5.924916	3386
## [680]	{ma,md}	=> {nj}	0.09735200	0.9297090	6.705974	3386
## [681]	{al,ga,tn}	=> {nc}	0.09735200	0.9397724	5.515731	3386
## [682]	{al,ga,nc}	=> {tn}	0.09735200	0.7974564	5.660476	3386
## [683]	{al,nc,tn}	=> {ga}	0.09735200	0.9608400	5.624196	3386
## [684]	{ga,nc,tn}	=> {al}	0.09735200	0.9092374	5.546157	3386
## [685]	{ma,pa,va}	=> {ny}	0.09735200	0.9755114	5.877232	3386
## [686]	{ma,ny,va}	=> {pa}	0.09735200	0.9616586	6.110239	3386
## [687]	{ma,ny,pa}	=> {va}	0.09735200	0.8528967	5.261547	3386
## [688]	{ny,pa,va}	=> {ma}	0.09735200	0.8838423	6.194020	3386

## [689]	{nc,tn}	=> {pa}	0.09732325	0.8046114	5.112384	3385
## [690]	{pa,tn}	=> {nc}	0.09732325	0.9223433	5.413436	3385
## [691]	{nc,pa}	=> {tn}	0.09732325	0.8571790	6.084397	3385
## [692]	{nc,nj}	=> {ny}	0.09732325	0.8995482	5.419572	3385
## [693]	{nj,ny}	=> {nc}	0.09732325	0.7957217	4.670266	3385
## [694]	{nc,ny}	=> {nj}	0.09732325	0.9007451	6.497058	3385
## [695]	{ky,va}	=> {il}	0.09729450	0.8593195	5.784399	3384
## [696]	{il,ky}	=> {va}	0.09729450	0.8988048	5.544755	3384
## [697]	{il,va}	=> {ky}	0.09729450	0.8670254	6.620419	3384
## [698]	{on,wi}	=> {ny}	0.09726575	0.9225525	5.558167	3383
## [699]	{ny,wi}	=> {on}	0.09726575	0.9121057	6.259658	3383
## [700]	{ny,on}	=> {wi}	0.09726575	0.8263312	6.651383	3383
## [701]	{nc,pa,va}	=> {ny}	0.09720825	0.9013596	5.430485	3381
## [702]	{nc,ny,va}	=> {pa}	0.09720825	0.9452055	6.005698	3381
## [703]	{nc,ny,pa}	=> {va}	0.09720825	0.9618777	5.933854	3381
## [704]	{ny,pa,va}	=> {nc}	0.09720825	0.8825372	5.179805	3381
## [705]	{nj,oh}	=> {il}	0.09717949	0.9108057	6.130972	3380
## [706]	{il,nj}	=> {oh}	0.09717949	0.9257738	6.747556	3380
## [707]	{il,oh}	=> {nj}	0.09717949	0.8274174	5.968147	3380
## [708]	{oh,wv}	=> {va}	0.09715074	0.9499578	5.860320	3379
## [709]	{va,wv}	=> {oh}	0.09715074	0.8986702	6.550010	3379
## [710]	{oh,va}	=> {wv}	0.09715074	0.8702035	7.451144	3379
## [711]	{ma,on}	=> {pa}	0.09709324	0.9244457	5.873793	3377
## [712]	{ma,pa}	=> {on}	0.09709324	0.8166868	5.604811	3377
## [713]	{on,pa}	=> {ma}	0.09709324	0.8983772	6.295881	3377
## [714]	{il,ma}	=> {pa}	0.09706449	0.9493813	6.032231	3376
## [715]	{ma,pa}	=> {il}	0.09706449	0.8164450	5.495795	3376
## [716]	{il,pa}	=> {ma}	0.09706449	0.8335802	5.841780	3376
## [717]	{ga,la,sc}	=> {nc}	0.09706449	0.9388209	5.510147	3376
## [718]	{la,nc,sc}	=> {ga}	0.09706449	0.9692794	5.673596	3376
## [719]	{ga,la,nc}	=> {sc}	0.09706449	0.9687231	6.202717	3376
## [720]	{ga,nc,sc}	=> {la}	0.09706449	0.7591635	5.123101	3376
## [721]	{ma,mi,pa}	=> {ny}	0.09706449	0.9851182	5.935111	3376
## [722]	{ma,mi,ny}	=> {pa}	0.09706449	0.9536723	6.059495	3376
## [723]	{ma,ny,pa}	=> {mi}	0.09706449	0.8503778	6.247780	3376
## [724]	{mi,ny,pa}	=> {ma}	0.09706449	0.9107095	6.382306	3376
## [725]	{ga,ms}	=> {va}	0.09703574	0.7999526	4.934933	3375
## [726]	{ms,va}	=> {ga}	0.09703574	0.9464386	5.539899	3375
## [727]	{ga,va}	=> {ms}	0.09703574	0.7939308	5.734934	3375
## [728]	{ma,nj}	=> {va}	0.09703574	0.8748056	5.396703	3375
## [729]	{nj,va}	=> {ma}	0.09703574	0.8362240	5.860308	3375
## [730]	{ma,va}	=> {nj}	0.09703574	0.9241512	6.665886	3375
## [731]	{oh,on}	=> {pa}	0.09703574	0.9467041	6.015220	3375
## [732]	{oh,pa}	=> {on}	0.09703574	0.8024251	5.506935	3375
## [733]	{on,pa}	=> {oh}	0.09703574	0.8978452	6.543997	3375
## [734]	{il,nj,pa}	=> {ny}	0.09700699	0.9642755	5.809539	3374
## [735]	{il,nj,ny}	=> {pa}	0.09700699	0.9785383	6.217490	3374
## [736]	{nj,ny,pa}	=> {il}	0.09700699	0.8466750	5.699285	3374
## [737]	{il,ny,pa}	=> {nj}	0.09700699	0.9084545	6.552666	3374
## [738]	{mi,nj}	=> {pa}	0.09697824	0.9700892	6.163805	3373
## [739]	{nj,pa}	=> {mi}	0.09697824	0.7938338	5.832348	3373
## [740]	{mi,pa}	=> {nj}	0.09697824	0.8718015	6.288289	3373
## [741]	{il,va}	=> {ny}	0.09697824	0.8642070	5.206649	3373
## [742]	{ny,va}	=> {il}	0.09697824	0.8248961	5.552682	3373

## [743]	{il,ny}	=> {va}	0.09697824	0.8464241	5.221617	3373
## [744]	{ky,oh}	=> {va}	0.09694948	0.9245956	5.703859	3372
## [745]	{ky,va}	=> {oh}	0.09694948	0.8562722	6.240990	3372
## [746]	{oh,va}	=> {ky}	0.09694948	0.8684007	6.630921	3372
## [747]	{al,nc,tn}	=> {va}	0.09694948	0.9568672	5.902944	3372
## [748]	{al,tn,va}	=> {nc}	0.09694948	0.9628784	5.651345	3372
## [749]	{al,nc,va}	=> {tn}	0.09694948	0.8726708	6.194360	3372
## [750]	{nc,tn,va}	=> {al}	0.09694948	0.8506559	5.188822	3372
## [751]	{in,oh,pa}	=> {ny}	0.09694948	0.9382304	5.652623	3372
## [752]	{in,ny,oh}	=> {pa}	0.09694948	0.9695227	6.160206	3372
## [753]	{in,ny,pa}	=> {oh}	0.09694948	0.9620542	7.011988	3372
## [754]	{ny,oh,pa}	=> {in}	0.09694948	0.8675071	6.795667	3372
## [755]	{sc,tn}	=> {al}	0.09692073	0.9123139	5.564923	3371
## [756]	{al,tn}	=> {sc}	0.09692073	0.8688144	5.563003	3371
## [757]	{al,tx}	=> {ga}	0.09692073	0.8998932	5.267450	3371
## [758]	{ga,tx}	=> {al}	0.09692073	0.9332780	5.692799	3371
## [759]	{in,md}	=> {il}	0.09692073	0.9536068	6.419082	3371
## [760]	{il,in}	=> {md}	0.09692073	0.8154330	5.552384	3371
## [761]	{il,md}	=> {in}	0.09692073	0.9020605	7.066344	3371
## [762]	{al,ms}	=> {tx}	0.09686323	0.7757311	3.180561	3369
## [763]	{ms,tx}	=> {al}	0.09686323	0.9204918	5.614806	3369
## [764]	{al,tx}	=> {ms}	0.09686323	0.8993593	6.496494	3369
## [765]	{pa,wi}	=> {ny}	0.09683448	0.9573621	5.767887	3368
## [766]	{ny,wi}	=> {pa}	0.09683448	0.9080615	5.769691	3368
## [767]	{ct,ma}	=> {oh}	0.09683448	0.8422106	6.138501	3368
## [768]	{ct,oh}	=> {ma}	0.09683448	0.9489997	6.650647	3368
## [769]	{ma,oh}	=> {ct}	0.09683448	0.9217296	7.300997	3368
## [770]	{md,nc,va}	=> {ny}	0.09683448	0.8365623	5.040096	3368
## [771]	{md,nc,ny}	=> {va}	0.09683448	0.9767981	6.025899	3368
## [772]	{md,ny,va}	=> {nc}	0.09683448	0.9078167	5.328176	3368
## [773]	{nc,ny,va}	=> {md}	0.09683448	0.9415711	6.411274	3368
## [774]	{in,md}	=> {va}	0.09680573	0.9524752	5.875850	3367
## [775]	{in,va}	=> {md}	0.09680573	0.9217082	6.276024	3367
## [776]	{md,va}	=> {in}	0.09680573	0.7557800	5.920447	3367
## [777]	{mi,on,pa}	=> {ny}	0.09680573	0.9799185	5.903784	3367
## [778]	{mi,ny,on}	=> {pa}	0.09680573	0.9191919	5.840412	3367
## [779]	{mi,ny,pa}	=> {on}	0.09680573	0.9082816	6.233414	3367
## [780]	{ny,on,pa}	=> {mi}	0.09680573	0.9280595	6.818513	3367
## [781]	{ky,oh}	=> {pa}	0.09677698	0.9229504	5.864292	3366
## [782]	{ky,pa}	=> {oh}	0.09677698	0.9209302	6.712254	3366
## [783]	{oh,pa}	=> {ky}	0.09677698	0.8002853	6.110806	3366
## [784]	{ky,tn}	=> {md}	0.09674822	0.8442047	5.748294	3365
## [785]	{ky,md}	=> {tn}	0.09674822	0.9275083	6.583605	3365
## [786]	{md,tn}	=> {ky}	0.09674822	0.8980518	6.857330	3365
## [787]	{al,md}	=> {va}	0.09671947	0.9636207	5.944607	3364
## [788]	{al,va}	=> {md}	0.09671947	0.8312330	5.659968	3364
## [789]	{md,va}	=> {al}	0.09671947	0.7551066	4.605991	3364
## [790]	{oh,tn}	=> {va}	0.09671947	0.9441482	5.824480	3364
## [791]	{tn,va}	=> {oh}	0.09671947	0.7956481	5.799127	3364
## [792]	{oh,va}	=> {tn}	0.09671947	0.8663405	6.149426	3364
## [793]	{nc,oh}	=> {pa}	0.09666197	0.9470423	6.017369	3362
## [794]	{oh,pa}	=> {nc}	0.09666197	0.7993343	4.691469	3362
## [795]	{nc,pa}	=> {oh}	0.09666197	0.8513548	6.205149	3362
## [796]	{ky,mo}	=> {il}	0.09663322	0.9459612	6.367617	3361

## [797]	{il,ky}	=> {mo}	0.09663322	0.8926959	6.694449	3361
## [798]	{il,mo}	=> {ky}	0.09663322	0.8446846	6.449830	3361
## [799]	{md,nj,pa,va}	=> {ny}	0.09660447	0.9523810	5.737877	3360
## [800]	{md,nj,ny,va}	=> {pa}	0.09660447	0.9666283	6.141816	3360
## [801]	{md,nj,ny,pa}	=> {va}	0.09660447	0.9464789	5.838858	3360
## [802]	{nj,ny,pa,va}	=> {md}	0.09660447	0.9548167	6.501464	3360
## [803]	{md,ny,pa,va}	=> {nj}	0.09660447	0.9451477	6.817333	3360
## [804]	{in,mi}	=> {oh}	0.09657572	0.9451322	6.888651	3359
## [805]	{in,oh}	=> {mi}	0.09657572	0.8601793	6.319792	3359
## [806]	{mi,oh}	=> {in}	0.09657572	0.8938265	7.001842	3359
## [807]	{in,md}	=> {pa}	0.09651821	0.9496464	6.033915	3357
## [808]	{in,pa}	=> {md}	0.09651821	0.8878604	6.045550	3357
## [809]	{md,pa}	=> {in}	0.09651821	0.7956862	6.233054	3357
## [810]	{nj,oh}	=> {md}	0.09651821	0.9046079	6.159587	3357
## [811]	{md,nj}	=> {oh}	0.09651821	0.8382022	6.109286	3357
## [812]	{md,oh}	=> {nj}	0.09651821	0.8918704	6.433045	3357
## [813]	{nj,oh}	=> {va}	0.09648946	0.9043385	5.578892	3356
## [814]	{nj,va}	=> {oh}	0.09648946	0.8315164	6.060555	3356
## [815]	{oh,va}	=> {nj}	0.09648946	0.8642802	6.234038	3356
## [816]	{al,ga,la}	=> {nc}	0.09648946	0.8918416	5.234415	3356
## [817]	{al,la,nc}	=> {ga}	0.09648946	0.9702226	5.679117	3356
## [818]	{ga,la,nc}	=> {al}	0.09648946	0.9629842	5.874001	3356
## [819]	{al,ga,nc}	=> {la}	0.09648946	0.7903910	5.333835	3356
## [820]	{ga,la}	=> {tx}	0.09643196	0.8408122	3.447400	3354
## [821]	{la,tx}	=> {ga}	0.09643196	0.7978116	4.669924	3354
## [822]	{ga,tx}	=> {la}	0.09643196	0.9285714	6.266326	3354
## [823]	{il,on}	=> {ny}	0.09640321	0.9363306	5.641177	3353
## [824]	{ny,on}	=> {il}	0.09640321	0.8190034	5.513017	3353
## [825]	{il,ny}	=> {on}	0.09640321	0.8414053	5.774451	3353
## [826]	{al,fl,ga}	=> {nc}	0.09640321	0.8704569	5.108903	3353
## [827]	{al,fl,nc}	=> {ga}	0.09640321	0.9735772	5.698753	3353
## [828]	{fl,ga,nc}	=> {al}	0.09640321	0.9547267	5.823632	3353
## [829]	{al,ga,nc}	=> {fl}	0.09640321	0.7896844	4.148318	3353
## [830]	{ct,il}	=> {ny}	0.09637446	0.9769746	5.886048	3352
## [831]	{ct,ny}	=> {il}	0.09637446	0.8112294	5.460687	3352
## [832]	{il,ny}	=> {ct}	0.09637446	0.8411543	6.662762	3352
## [833]	{il,md}	=> {ny}	0.09634571	0.8967086	5.402463	3351
## [834]	{md,ny}	=> {il}	0.09634571	0.8263872	5.562720	3351
## [835]	{il,ny}	=> {md}	0.09634571	0.8409034	5.725815	3351
## [836]	{ma,md}	=> {va}	0.09631695	0.9198243	5.674425	3350
## [837]	{ma,va}	=> {md}	0.09631695	0.9173056	6.246047	3350
## [838]	{md,va}	=> {ma}	0.09631695	0.7519641	5.269809	3350
## [839]	{al,ar}	=> {ga}	0.09628820	0.9251381	5.415219	3349
## [840]	{ar,ga}	=> {al}	0.09628820	0.9391475	5.728602	3349
## [841]	{ky,md}	=> {nc}	0.09625945	0.9228225	5.416249	3348
## [842]	{ky,nc}	=> {md}	0.09625945	0.8885350	6.050144	3348
## [843]	{md,nc}	=> {ky}	0.09625945	0.8044210	6.142385	3348
## [844]	{ky,md}	=> {pa}	0.09625945	0.9228225	5.863480	3348
## [845]	{ky,pa}	=> {md}	0.09625945	0.9160055	6.237194	3348
## [846]	{md,pa}	=> {ky}	0.09625945	0.7935530	6.059400	3348
## [847]	{mi,wi}	=> {il}	0.09625945	0.8773585	5.905827	3348
## [848]	{il,wi}	=> {mi}	0.09625945	0.9187706	6.750266	3348
## [849]	{il,mi}	=> {wi}	0.09625945	0.8836105	7.112440	3348
## [850]	{ct,md,pa}	=> {ny}	0.09625945	0.9849956	5.934372	3348

## [851]	{ct,md,ny}	=> {pa}	0.09625945	0.9709977	6.169578	3348
## [852]	{ct,ny,pa}	=> {md}	0.09625945	0.8716480	5.935158	3348
## [853]	{md,ny,pa}	=> {ct}	0.09625945	0.8752941	6.933183	3348
## [854]	{al,ky}	=> {tn}	0.09623070	0.9593007	6.809273	3347
## [855]	{al,tn}	=> {ky}	0.09623070	0.8626289	6.586848	3347
## [856]	{ky,tn}	=> {al}	0.09623070	0.8396889	5.121926	3347
## [857]	{mi,oh}	=> {on}	0.09623070	0.8906333	6.112296	3347
## [858]	{mi,on}	=> {oh}	0.09623070	0.8352882	6.088047	3347
## [859]	{oh,on}	=> {mi}	0.09623070	0.9388499	6.897790	3347
## [860]	{ct,ma}	=> {mi}	0.09620195	0.8367092	6.147356	3346
## [861]	{ct,mi}	=> {ma}	0.09620195	0.9565466	6.703536	3346
## [862]	{ma,mi}	=> {ct}	0.09620195	0.9202420	7.289214	3346
## [863]	{ct,mi}	=> {pa}	0.09620195	0.9565466	6.077758	3346
## [864]	{ct,pa}	=> {mi}	0.09620195	0.8492386	6.239410	3346
## [865]	{mi,pa}	=> {ct}	0.09620195	0.8648230	6.850241	3346
## [866]	{al,fl,sc}	=> {nc}	0.09614445	0.9191864	5.394907	3344
## [867]	{fl,nc,sc}	=> {al}	0.09614445	0.9494605	5.791509	3344
## [868]	{al,fl,nc}	=> {sc}	0.09614445	0.9709640	6.217065	3344
## [869]	{al,nc,sc}	=> {fl}	0.09614445	0.8061716	4.234928	3344
## [870]	{ga,ky}	=> {nc}	0.09611570	0.9390449	5.511462	3343
## [871]	{ky,nc}	=> {ga}	0.09611570	0.8872081	5.193198	3343
## [872]	{ct,ma}	=> {md}	0.09611570	0.8359590	5.692148	3343
## [873]	{ct,md}	=> {ma}	0.09611570	0.9494462	6.653775	3343
## [874]	{ma,md}	=> {ct}	0.09611570	0.9179023	7.270681	3343
## [875]	{mi,on}	=> {il}	0.09611570	0.8342900	5.615916	3343
## [876]	{il,mi}	=> {on}	0.09611570	0.8822908	6.055043	3343
## [877]	{il,on}	=> {mi}	0.09611570	0.9335381	6.858764	3343
## [878]	{il,oh,va}	=> {pa}	0.09611570	0.9545974	6.065373	3343
## [879]	{oh,pa,va}	=> {il}	0.09611570	0.9106510	6.129931	3343
## [880]	{il,oh,pa}	=> {va}	0.09611570	0.8981730	5.540858	3343
## [881]	{il,pa,va}	=> {oh}	0.09611570	0.9456860	6.892687	3343
## [882]	{ma,me}	=> {ny}	0.09608694	0.9631124	5.802531	3342
## [883]	{me,ny}	=> {ma}	0.09608694	0.9249931	6.482407	3342
## [884]	{ma,ny}	=> {me}	0.09608694	0.7644099	6.698650	3342
## [885]	{ky,oh}	=> {il}	0.09608694	0.9163696	6.168425	3342
## [886]	{il,ky}	=> {oh}	0.09608694	0.8876494	6.469684	3342
## [887]	{il,oh}	=> {ky}	0.09608694	0.8181151	6.246951	3342
## [888]	{ga,ky}	=> {va}	0.09602944	0.9382022	5.787799	3340
## [889]	{ky,va}	=> {ga}	0.09602944	0.8481463	4.964553	3340
## [890]	{ga,va}	=> {ky}	0.09602944	0.7856975	5.999417	3340
## [891]	{md,tn,va}	=> {pa}	0.09602944	0.9133169	5.803083	3340
## [892]	{md,pa,tn}	=> {va}	0.09602944	0.9826420	6.061949	3340
## [893]	{pa,tn,va}	=> {md}	0.09602944	0.9499431	6.468279	3340
## [894]	{md,pa,va}	=> {tn}	0.09602944	0.8581706	6.091435	3340
## [895]	{il,in,oh}	=> {ny}	0.09602944	0.8968851	5.403527	3340
## [896]	{in,ny,oh}	=> {il}	0.09602944	0.9603220	6.464285	3340
## [897]	{il,in,ny}	=> {oh}	0.09602944	0.9572944	6.977296	3340
## [898]	{il,ny,oh}	=> {in}	0.09602944	0.9216336	7.219670	3340
## [899]	{nc,nj,va}	=> {pa}	0.09602944	0.9246955	5.875380	3340
## [900]	{nc,nj,pa}	=> {va}	0.09602944	0.9709302	5.989699	3340
## [901]	{nj,pa,va}	=> {nc}	0.09602944	0.8985741	5.273930	3340
## [902]	{nc,pa,va}	=> {nj}	0.09602944	0.8904292	6.422650	3340
## [903]	{tn,wv}	=> {va}	0.09600069	0.9743216	6.010620	3339
## [904]	{va,wv}	=> {tn}	0.09600069	0.8880319	6.303396	3339

## [905]	{tn,va}	=> {wv}	0.09600069	0.7897351	6.762131	3339
## [906]	{ga,sc,tn}	=> {va}	0.09597194	0.9491044	5.855055	3338
## [907]	{ga,sc,va}	=> {tn}	0.09597194	0.8598660	6.103470	3338
## [908]	{sc,tn,va}	=> {ga}	0.09597194	0.9591954	5.614570	3338
## [909]	{ga,tn,va}	=> {sc}	0.09597194	0.9150219	5.858869	3338
## [910]	{il,in,pa}	=> {ny}	0.09597194	0.9318816	5.614373	3338
## [911]	{il,in,ny}	=> {pa}	0.09597194	0.9567211	6.078867	3338
## [912]	{in,ny,pa}	=> {il}	0.09597194	0.9523538	6.410648	3338
## [913]	{il,ny,pa}	=> {in}	0.09597194	0.8987614	7.040500	3338
## [914]	{nv,ut}	=> {ca}	0.09591444	0.8300572	2.472612	3336
## [915]	{ca,ut}	=> {nv}	0.09591444	0.8660436	5.312498	3336
## [916]	{md,va,wv}	=> {pa}	0.09591444	0.9572453	6.082198	3336
## [917]	{md,pa,wv}	=> {va}	0.09591444	0.9663963	5.961729	3336
## [918]	{pa,va,wv}	=> {md}	0.09591444	0.9547796	6.501212	3336
## [919]	{md,pa,va}	=> {wv}	0.09591444	0.8571429	7.339312	3336
## [920]	{in,nj}	=> {pa}	0.09588568	0.9675080	6.147405	3335
## [921]	{in,pa}	=> {nj}	0.09588568	0.8820418	6.362152	3335
## [922]	{nj,pa}	=> {in}	0.09588568	0.7848906	6.148486	3335
## [923]	{ma,md,nj}	=> {ny}	0.09588568	0.9849380	5.934025	3335
## [924]	{ma,nj,ny}	=> {md}	0.09588568	0.8869681	6.039475	3335
## [925]	{md,nj,ny}	=> {ma}	0.09588568	0.9045294	6.338996	3335
## [926]	{ma,md,ny}	=> {nj}	0.09588568	0.9436899	6.806818	3335
## [927]	{ct,ma}	=> {va}	0.09585693	0.8337084	5.143174	3334
## [928]	{ct,va}	=> {ma}	0.09585693	0.9455474	6.626452	3334
## [929]	{ma,va}	=> {ct}	0.09585693	0.9129244	7.231251	3334
## [930]	{in,oh}	=> {md}	0.09577068	0.8530090	5.808243	3331
## [931]	{in,md}	=> {oh}	0.09577068	0.9422914	6.867946	3331
## [932]	{md,oh}	=> {in}	0.09577068	0.8849628	6.932408	3331
## [933]	{nj,on}	=> {ny}	0.09577068	0.9837566	5.926908	3331
## [934]	{nj,ny}	=> {on}	0.09577068	0.7830277	5.373814	3331
## [935]	{ny,on}	=> {nj}	0.09577068	0.8136297	5.868697	3331
## [936]	{ct,ma,oh}	=> {ny}	0.09574193	0.9887173	5.956795	3330
## [937]	{ct,ma,ny}	=> {oh}	0.09574193	0.8584687	6.256999	3330
## [938]	{ct,ny,oh}	=> {ma}	0.09574193	0.9585492	6.717570	3330
## [939]	{ma,ny,oh}	=> {ct}	0.09574193	0.9372361	7.423824	3330
## [940]	{ct,ma}	=> {on}	0.09571318	0.8324581	5.713048	3329
## [941]	{ct,on}	=> {ma}	0.09571318	0.9593660	6.723294	3329
## [942]	{ma,on}	=> {ct}	0.09571318	0.9113058	7.218430	3329
## [943]	{al,la,sc}	=> {nc}	0.09571318	0.9348498	5.486839	3329
## [944]	{la,nc,sc}	=> {al}	0.09571318	0.9557852	5.830089	3329
## [945]	{al,la,nc}	=> {sc}	0.09571318	0.9624169	6.162338	3329
## [946]	{al,nc,sc}	=> {la}	0.09571318	0.8025554	5.415926	3329
## [947]	{mi,nj,pa}	=> {ny}	0.09568443	0.9866588	5.944393	3328
## [948]	{mi,nj,ny}	=> {pa}	0.09568443	0.9770992	6.208346	3328
## [949]	{nj,ny,pa}	=> {mi}	0.09568443	0.8351317	6.135766	3328
## [950]	{mi,ny,pa}	=> {nj}	0.09568443	0.8977610	6.475534	3328
## [951]	{ct,nj}	=> {md}	0.09565567	0.8879103	6.045891	3327
## [952]	{ct,md}	=> {nj}	0.09565567	0.9449020	6.815561	3327
## [953]	{md,nj}	=> {ct}	0.09565567	0.8307116	6.580046	3327
## [954]	{al,md}	=> {nc}	0.09559817	0.9524492	5.590134	3325
## [955]	{md,nc}	=> {al}	0.09559817	0.7988948	4.873090	3325
## [956]	{al,la,ms,sc}	=> {ga}	0.09556942	0.9808203	5.741150	3324
## [957]	{ga,la,ms,sc}	=> {al}	0.09556942	0.9764982	5.956434	3324
## [958]	{al,ga,la,ms}	=> {sc}	0.09556942	0.9366019	5.997045	3324

## [959]	{al,ga,ms,sc}	=> {la}	0.09556942	0.8937887	6.031599	3324
## [960]	{al,ga,la,sc}	=> {ms}	0.09556942	0.9587540	6.925529	3324
## [961]	{ct,pa,va}	=> {ny}	0.09554067	0.9813940	5.912673	3323
## [962]	{ct,ny,va}	=> {pa}	0.09554067	0.9668315	6.143107	3323
## [963]	{ct,ny,pa}	=> {va}	0.09554067	0.8651393	5.337072	3323
## [964]	{ny,pa,va}	=> {ct}	0.09554067	0.8673975	6.870634	3323
## [965]	{al,fl,la}	=> {ga}	0.09551192	0.9515898	5.570051	3322
## [966]	{fl,ga,la}	=> {al}	0.09551192	0.9612269	5.863282	3322
## [967]	{al,fl,ga}	=> {la}	0.09551192	0.8624091	5.819839	3322
## [968]	{al,ga,la}	=> {fl}	0.09551192	0.8828063	4.637500	3322
## [969]	{al,ga,tn}	=> {va}	0.09551192	0.9220094	5.687905	3322
## [970]	{al,ga,va}	=> {tn}	0.09551192	0.8769799	6.224947	3322
## [971]	{al,tn,va}	=> {ga}	0.09551192	0.9486008	5.552555	3322
## [972]	{ga,tn,va}	=> {al}	0.09551192	0.9106360	5.554688	3322
## [973]	{ma,on,pa}	=> {ny}	0.09551192	0.9837134	5.926647	3322
## [974]	{ma,ny,on}	=> {pa}	0.09551192	0.9392140	5.967629	3322
## [975]	{ma,ny,pa}	=> {on}	0.09551192	0.8367758	5.742680	3322
## [976]	{ny,on,pa}	=> {ma}	0.09551192	0.9156560	6.416972	3322
## [977]	{ma,nj}	=> {oh}	0.09548317	0.8608087	6.274054	3321
## [978]	{nj,oh}	=> {ma}	0.09548317	0.8949070	6.271562	3321
## [979]	{ma,oh}	=> {nj}	0.09548317	0.9088670	6.555641	3321
## [980]	{id,mt}	=> {wa}	0.09536816	0.8492063	5.223956	3317
## [981]	{id,wa}	=> {mt}	0.09536816	0.8357269	6.055712	3317
## [982]	{mt,wa}	=> {id}	0.09536816	0.9383310	6.363051	3317
## [983]	{ms,sc}	=> {va}	0.09536816	0.8378378	5.168648	3317
## [984]	{ms,va}	=> {sc}	0.09536816	0.9301739	5.955887	3317
## [985]	{sc,va}	=> {ms}	0.09536816	0.7956344	5.747240	3317
## [986]	{nc,tn,va}	=> {pa}	0.09536816	0.8367810	5.316785	3317
## [987]	{nc,pa,tn}	=> {va}	0.09536816	0.9799114	6.045104	3317
## [988]	{pa,tn,va}	=> {nc}	0.09536816	0.9434016	5.537032	3317
## [989]	{nc,pa,va}	=> {tn}	0.09536816	0.8842975	6.276888	3317
## [990]	{oh,wv}	=> {md}	0.09531066	0.9319651	6.345865	3315
## [991]	{md,wv}	=> {oh}	0.09531066	0.9172662	6.685548	3315
## [992]	{md,oh}	=> {wv}	0.09531066	0.8807120	7.541124	3315
## [993]	{mi,wi}	=> {pa}	0.09525316	0.8681866	5.516331	3313
## [994]	{pa,wi}	=> {mi}	0.09525316	0.9417283	6.918938	3313
## [995]	{mi,pa}	=> {wi}	0.09525316	0.8562936	6.892559	3313
## [996]	{ct,nj}	=> {va}	0.09525316	0.8841740	5.454497	3313
## [997]	{ct,va}	=> {nj}	0.09525316	0.9395916	6.777257	3313
## [998]	{nj,va}	=> {ct}	0.09525316	0.8208622	6.502029	3313
## [999]	{ct,ma,md}	=> {ny}	0.09525316	0.9910260	5.970704	3313
## [1000]	{ct,ma,ny}	=> {md}	0.09525316	0.8540861	5.815577	3313
## [1001]	{ct,md,ny}	=> {ma}	0.09525316	0.9608469	6.733672	3313
## [1002]	{ma,md,ny}	=> {ct}	0.09525316	0.9374646	7.425634	3313
## [1003]	{il,mi,pa}	=> {ny}	0.09525316	0.9653263	5.815870	3313
## [1004]	{il,mi,ny}	=> {pa}	0.09525316	0.9536557	6.059390	3313
## [1005]	{mi,ny,pa}	=> {il}	0.09525316	0.8937146	6.015926	3313
## [1006]	{il,ny,pa}	=> {mi}	0.09525316	0.8920302	6.553802	3313
## [1007]	{md,sc}	=> {ga}	0.09522440	0.9363868	5.481062	3312
## [1008]	{ga,md}	=> {sc}	0.09522440	0.9041769	5.789429	3312
## [1009]	{mo,oh}	=> {il}	0.09522440	0.9678551	6.514993	3312
## [1010]	{il,mo}	=> {oh}	0.09522440	0.8323699	6.066777	3312
## [1011]	{il,oh}	=> {mo}	0.09522440	0.8107711	6.080084	3312
## [1012]	{in,tn}	=> {il}	0.09522440	0.9536424	6.419322	3312

## [1013]	{il,tn}	=> {in}	0.09522440	0.8963464	7.021582	3312
## [1014]	{il,in}	=> {tn}	0.09522440	0.8011611	5.686772	3312
## [1015]	{fl,ms,sc}	=> {ga}	0.09522440	0.9781453	5.725492	3312
## [1016]	{fl,ga,ms}	=> {sc}	0.09522440	0.9361221	5.993973	3312
## [1017]	{fl,ga,sc}	=> {ms}	0.09522440	0.8888889	6.420861	3312
## [1018]	{ga,ms,sc}	=> {fl}	0.09522440	0.8654298	4.546219	3312
## [1019]	{ky,md,tn}	=> {va}	0.09522440	0.9842496	6.071867	3312
## [1020]	{ky,tn,va}	=> {md}	0.09522440	0.9081437	6.183662	3312
## [1021]	{ky,md,va}	=> {tn}	0.09522440	0.9427839	6.692034	3312
## [1022]	{md,tn,va}	=> {ky}	0.09522440	0.9056604	6.915428	3312
## [1023]	{ct,il}	=> {pa}	0.09519565	0.9650248	6.131627	3311
## [1024]	{ct,pa}	=> {il}	0.09519565	0.8403553	5.656744	3311
## [1025]	{il,pa}	=> {ct}	0.09519565	0.8175309	6.475641	3311
## [1026]	{il,nj,oh}	=> {pa}	0.09519565	0.9795858	6.224146	3311
## [1027]	{nj,oh,pa}	=> {il}	0.09519565	0.9159059	6.165304	3311
## [1028]	{il,nj,pa}	=> {oh}	0.09519565	0.9462704	6.896947	3311
## [1029]	{il,oh,pa}	=> {nj}	0.09519565	0.8895755	6.416492	3311
## [1030]	{ma,nj,va}	=> {ny}	0.09516690	0.9807407	5.908738	3310
## [1031]	{ma,nj,ny}	=> {va}	0.09516690	0.8803191	5.430717	3310
## [1032]	{nj,ny,va}	=> {ma}	0.09516690	0.9016617	6.318899	3310
## [1033]	{ma,ny,va}	=> {nj}	0.09516690	0.9400738	6.780736	3310
## [1034]	{fl,ms,sc}	=> {al}	0.09513815	0.9772593	5.961076	3309
## [1035]	{al,fl,ms}	=> {sc}	0.09513815	0.9194221	5.887043	3309
## [1036]	{al,fl,sc}	=> {ms}	0.09513815	0.9095657	6.570219	3309
## [1037]	{al,ms,sc}	=> {fl}	0.09513815	0.8696452	4.568363	3309
## [1038]	{ky,tn}	=> {oh}	0.09510940	0.8299047	6.048809	3308
## [1039]	{ky,oh}	=> {tn}	0.09510940	0.9070469	6.438367	3308
## [1040]	{oh,tn}	=> {ky}	0.09510940	0.9284311	7.089300	3308
## [1041]	{ct,ma,oh}	=> {pa}	0.09510940	0.9821853	6.240662	3308
## [1042]	{ct,ma,pa}	=> {oh}	0.09510940	0.8909238	6.493550	3308
## [1043]	{ct,oh,pa}	=> {ma}	0.09510940	0.9571759	6.707946	3308
## [1044]	{ma,oh,pa}	=> {ct}	0.09510940	0.9384397	7.433357	3308
## [1045]	{de,md}	=> {va}	0.09508065	0.9686585	5.975685	3307
## [1046]	{de,va}	=> {md}	0.09508065	0.9689423	6.597647	3307
## [1047]	{ct,mi,pa}	=> {ny}	0.09508065	0.9883443	5.954548	3307
## [1048]	{ct,mi,ny}	=> {pa}	0.09508065	0.9649840	6.131368	3307
## [1049]	{ct,ny,pa}	=> {mi}	0.09508065	0.8609737	6.325629	3307
## [1050]	{mi,ny,pa}	=> {ct}	0.09508065	0.8920960	7.066270	3307
## [1051]	{md,nj,oh}	=> {pa}	0.09508065	0.9851057	6.259219	3307
## [1052]	{nj,oh,pa}	=> {md}	0.09508065	0.9147994	6.228982	3307
## [1053]	{md,nj,pa}	=> {oh}	0.09508065	0.8865952	6.462001	3307
## [1054]	{md,oh,pa}	=> {nj}	0.09508065	0.9130315	6.585680	3307
## [1055]	{ct,ma,mi}	=> {ny}	0.09502314	0.9877466	5.950946	3305
## [1056]	{ct,ma,ny}	=> {mi}	0.09502314	0.8520237	6.259873	3305
## [1057]	{ct,mi,ny}	=> {ma}	0.09502314	0.9644004	6.758575	3305
## [1058]	{ma,mi,ny}	=> {ct}	0.09502314	0.9336158	7.395147	3305
## [1059]	{il,ma,pa}	=> {ny}	0.09502314	0.9789692	5.898065	3305
## [1060]	{il,ma,ny}	=> {pa}	0.09502314	0.9652453	6.133028	3305
## [1061]	{ma,ny,pa}	=> {il}	0.09502314	0.8324937	5.603825	3305
## [1062]	{il,ny,pa}	=> {ma}	0.09502314	0.8898761	6.236305	3305
## [1063]	{in,ky}	=> {oh}	0.09499439	0.9278293	6.762538	3304
## [1064]	{ky,oh}	=> {in}	0.09499439	0.9059501	7.096813	3304
## [1065]	{in,oh}	=> {ky}	0.09499439	0.8460948	6.460597	3304
## [1066]	{fl,la,ms}	=> {al}	0.09499439	0.9627040	5.872292	3304

## [1067]	{al,fl,ms}	=> {la}	0.09499439	0.9180328	6.195207	3304
## [1068]	{al,fl,la}	=> {ms}	0.09499439	0.9464337	6.836534	3304
## [1069]	{al,la,ms}	=> {fl}	0.09499439	0.8770905	4.607474	3304
## [1070]	{il,md,va}	=> {pa}	0.09499439	0.9426534	5.989482	3304
## [1071]	{md,pa,va}	=> {il}	0.09499439	0.8489209	5.714402	3304
## [1072]	{il,md,pa}	=> {va}	0.09499439	0.9464337	5.838579	3304
## [1073]	{il,pa,va}	=> {md}	0.09499439	0.9346535	6.364170	3304
## [1074]	{il,md,oh}	=> {pa}	0.09496564	0.9686217	6.154481	3303
## [1075]	{md,oh,pa}	=> {il}	0.09496564	0.9119271	6.138521	3303
## [1076]	{il,oh,pa}	=> {md}	0.09496564	0.8874261	6.042594	3303
## [1077]	{il,md,pa}	=> {oh}	0.09496564	0.9461472	6.896049	3303
## [1078]	{oh,tn}	=> {pa}	0.09493689	0.9267471	5.888416	3302
## [1079]	{pa,tn}	=> {oh}	0.09493689	0.8997275	6.557716	3302
## [1080]	{oh,pa}	=> {tn}	0.09493689	0.7850689	5.572548	3302
## [1081]	{in,mi}	=> {ny}	0.09493689	0.9290940	5.597578	3302
## [1082]	{in,ny}	=> {mi}	0.09493689	0.8980147	6.597771	3302
## [1083]	{mi,ny}	=> {in}	0.09493689	0.8083231	6.332047	3302
## [1084]	{ma,mi}	=> {on}	0.09490814	0.9078658	6.230560	3301
## [1085]	{ma,on}	=> {mi}	0.09490814	0.9036408	6.639107	3301
## [1086]	{mi,on}	=> {ma}	0.09490814	0.8238083	5.773298	3301
## [1087]	{nj,oh,va}	=> {pa}	0.09490814	0.9836114	6.249724	3301
## [1088]	{nj,oh,pa}	=> {va}	0.09490814	0.9131397	5.633188	3301
## [1089]	{nj,pa,va}	=> {oh}	0.09490814	0.8880818	6.472836	3301
## [1090]	{oh,pa,va}	=> {nj}	0.09490814	0.8992100	6.485986	3301
## [1091]	{ky,md,nc}	=> {va}	0.09487939	0.9856631	6.080587	3300
## [1092]	{ky,md,va}	=> {nc}	0.09487939	0.9393681	5.513358	3300
## [1093]	{ky,nc,va}	=> {md}	0.09487939	0.9131157	6.217517	3300
## [1094]	{md,nc,va}	=> {ky}	0.09487939	0.8196721	6.258840	3300
## [1095]	{ga,nc,sc,tn}	=> {va}	0.09487939	0.9606987	5.926581	3300
## [1096]	{ga,sc,tn,va}	=> {nc}	0.09487939	0.9886159	5.802405	3300
## [1097]	{ga,nc,sc,va}	=> {tn}	0.09487939	0.8627451	6.123906	3300
## [1098]	{nc,sc,tn,va}	=> {ga}	0.09487939	0.9632224	5.638142	3300
## [1099]	{ga,nc,tn,va}	=> {sc}	0.09487939	0.9272267	5.937016	3300
## [1100]	{oh,on,pa}	=> {ny}	0.09485064	0.9774815	5.889102	3299
## [1101]	{ny,oh,on}	=> {pa}	0.09485064	0.9657494	6.136231	3299
## [1102]	{ny,oh,pa}	=> {on}	0.09485064	0.8487265	5.824696	3299
## [1103]	{ny,on,pa}	=> {oh}	0.09485064	0.9093164	6.627606	3299
## [1104]	{nj,va}	=> {il}	0.09482189	0.8171457	5.500512	3298
## [1105]	{il,nj}	=> {va}	0.09482189	0.9033142	5.572574	3298
## [1106]	{il,va}	=> {nj}	0.09482189	0.8449910	6.094905	3298
## [1107]	{id,mt}	=> {or}	0.09479313	0.8440860	4.177313	3297
## [1108]	{id,or}	=> {mt}	0.09479313	0.7851869	5.689497	3297
## [1109]	{mt,or}	=> {id}	0.09479313	0.9433476	6.397070	3297
## [1110]	{tn,va}	=> {ny}	0.09479313	0.7798013	4.698124	3297
## [1111]	{ny,tn}	=> {va}	0.09479313	0.9542692	5.886917	3297
## [1112]	{ny,va}	=> {tn}	0.09479313	0.8063096	5.723317	3297
## [1113]	{ga,la,ms}	=> {nc}	0.09479313	0.8988550	5.275578	3297
## [1114]	{la,ms,nc}	=> {ga}	0.09479313	0.9674296	5.662768	3297
## [1115]	{ga,ms,nc}	=> {la}	0.09479313	0.8792000	5.933150	3297
## [1116]	{ga,la,nc}	=> {ms}	0.09479313	0.9460545	6.833795	3297
## [1117]	{ga,ms,nc}	=> {va}	0.09479313	0.8792000	5.423813	3297
## [1118]	{ga,ms,va}	=> {nc}	0.09479313	0.9768889	5.733576	3297
## [1119]	{ms,nc,va}	=> {ga}	0.09479313	0.9634717	5.639601	3297
## [1120]	{ga,nc,va}	=> {ms}	0.09479313	0.7994665	5.774921	3297

## [1121]	{fl,la}	=> {sc}	0.09476438	0.8572172	5.488746	3296
## [1122]	{fl,sc}	=> {la}	0.09476438	0.8427512	5.687181	3296
## [1123]	{la,sc}	=> {fl}	0.09476438	0.8710359	4.575668	3296
## [1124]	{in,nj}	=> {ny}	0.09476438	0.9561938	5.760848	3296
## [1125]	{in,ny}	=> {nj}	0.09476438	0.8963829	6.465594	3296
## [1126]	{nj,ny}	=> {in}	0.09476438	0.7748002	6.069443	3296
## [1127]	{md,nc,pa}	=> {ny}	0.09476438	0.9122613	5.496165	3296
## [1128]	{md,nc,ny}	=> {pa}	0.09476438	0.9559165	6.073754	3296
## [1129]	{md,ny,pa}	=> {nc}	0.09476438	0.8616993	5.057503	3296
## [1130]	{nc,ny,pa}	=> {md}	0.09476438	0.9376956	6.384885	3296
## [1131]	{ky,wv}	=> {va}	0.09470688	0.9676851	5.969680	3294
## [1132]	{va,wv}	=> {ky}	0.09470688	0.8760638	6.689435	3294
## [1133]	{ky,va}	=> {wv}	0.09470688	0.8364652	7.162259	3294
## [1134]	{al,ga,sc}	=> {tn}	0.09467813	0.7619158	5.408203	3293
## [1135]	{al,sc,tn}	=> {ga}	0.09467813	0.9768615	5.717977	3293
## [1136]	{ga,sc,tn}	=> {al}	0.09467813	0.9363094	5.711290	3293
## [1137]	{al,ga,tn}	=> {sc}	0.09467813	0.9139606	5.852073	3293
## [1138]	{md,nc,nj}	=> {pa}	0.09467813	0.9333900	5.930624	3293
## [1139]	{md,nj,pa}	=> {nc}	0.09467813	0.8828418	5.181593	3293
## [1140]	{nc,nj,pa}	=> {md}	0.09467813	0.9572674	6.518152	3293
## [1141]	{md,nc,pa}	=> {nj}	0.09467813	0.9114309	6.574135	3293
## [1142]	{ky,pa}	=> {ny}	0.09464938	0.9006840	5.426414	3292
## [1143]	{ky,ny}	=> {pa}	0.09464938	0.9564207	6.076958	3292
## [1144]	{ky,tn}	=> {pa}	0.09462063	0.8256397	5.245995	3291
## [1145]	{ky,pa}	=> {tn}	0.09462063	0.9004104	6.391260	3291
## [1146]	{pa,tn}	=> {ky}	0.09462063	0.8967302	6.847239	3291
## [1147]	{al,la,ms}	=> {nc}	0.09459187	0.8733740	5.126025	3290
## [1148]	{la,ms,nc}	=> {al}	0.09459187	0.9653756	5.888588	3290
## [1149]	{al,ms,nc}	=> {la}	0.09459187	0.8813287	5.947515	3290
## [1150]	{al,la,nc}	=> {ms}	0.09459187	0.9511419	6.870544	3290
## [1151]	{ct,ma,va}	=> {ny}	0.09456312	0.9865027	5.943452	3289
## [1152]	{ct,ma,ny}	=> {va}	0.09456312	0.8478989	5.230715	3289
## [1153]	{ct,ny,va}	=> {ma}	0.09456312	0.9569392	6.706287	3289
## [1154]	{ma,ny,va}	=> {ct}	0.09456312	0.9341096	7.399059	3289
## [1155]	{pa,tn}	=> {ny}	0.09453437	0.8959128	5.397669	3288
## [1156]	{ny,tn}	=> {pa}	0.09453437	0.9516643	6.046736	3288
## [1157]	{nj,tn}	=> {va}	0.09450562	0.9684738	5.974545	3287
## [1158]	{tn,va}	=> {nj}	0.09450562	0.7774361	5.607633	3287
## [1159]	{nj,va}	=> {tn}	0.09450562	0.8144202	5.780888	3287
## [1160]	{in,nj}	=> {il}	0.09450562	0.9535828	6.418921	3287
## [1161]	{il,in}	=> {nj}	0.09450562	0.7951137	5.735141	3287
## [1162]	{il,nj}	=> {in}	0.09450562	0.9003013	7.052563	3287
## [1163]	{ct,md,nj}	=> {ny}	0.09450562	0.9879772	5.952336	3287
## [1164]	{ct,nj,ny}	=> {md}	0.09450562	0.8951525	6.095203	3287
## [1165]	{ct,md,ny}	=> {nj}	0.09450562	0.9533063	6.876181	3287
## [1166]	{md,nj,ny}	=> {ct}	0.09450562	0.8915107	7.061634	3287
## [1167]	{md,oh}	=> {nc}	0.09447687	0.8730074	5.123873	3286
## [1168]	{nc,oh}	=> {md}	0.09447687	0.9256338	6.302754	3286
## [1169]	{md,nc}	=> {oh}	0.09447687	0.7895243	5.754494	3286
## [1170]	{ct,md}	=> {va}	0.09444812	0.9329736	5.755544	3285
## [1171]	{ct,va}	=> {md}	0.09444812	0.9316506	6.343723	3285
## [1172]	{al,ms,nc}	=> {va}	0.09444812	0.8799893	5.428682	3285
## [1173]	{al,ms,va}	=> {nc}	0.09444812	0.9687408	5.685753	3285
## [1174]	{ms,nc,va}	=> {al}	0.09444812	0.9599649	5.855584	3285

## [1175] {al,nc,va}	=> {ms}	0.09444812	0.8501553	6.141070	3285
## [1176] {in,oh,va}	=> {il}	0.09444812	0.9610884	6.469443	3285
## [1177] {il,in,oh}	=> {va}	0.09444812	0.8821160	5.441801	3285
## [1178] {il,in,va}	=> {oh}	0.09444812	0.9450518	6.888065	3285
## [1179] {il,oh,va}	=> {in}	0.09444812	0.9380354	7.348155	3285
## [1180] {nc,nj,va}	=> {ny}	0.09444812	0.9094684	5.479339	3285
## [1181] {nc,nj,ny}	=> {va}	0.09444812	0.9704579	5.986785	3285
## [1182] {nj,ny,va}	=> {nc}	0.09444812	0.8948515	5.252081	3285
## [1183] {nc,ny,va}	=> {nj}	0.09444812	0.9183673	6.624167	3285
## [1184] {in,mi}	=> {pa}	0.09441937	0.9240293	5.871148	3284
## [1185] {in,pa}	=> {mi}	0.09441937	0.8685533	6.381316	3284
## [1186] {mi,pa}	=> {in}	0.09441937	0.8487981	6.649110	3284
## [1187] {mo,va}	=> {il}	0.09439062	0.9350612	6.294245	3283
## [1188] {il,mo}	=> {va}	0.09439062	0.8250817	5.089955	3283
## [1189] {il,va}	=> {mo}	0.09439062	0.8411478	6.307883	3283
## [1190] {ct,nj}	=> {oh}	0.09439062	0.8761676	6.385999	3283
## [1191] {ct,oh}	=> {nj}	0.09439062	0.9250493	6.672364	3283
## [1192] {nj,oh}	=> {ct}	0.09439062	0.8846672	7.007427	3283
## [1193] {md,nj}	=> {il}	0.09439062	0.8197253	5.517876	3283
## [1194] {il,nj}	=> {md}	0.09439062	0.8992057	6.122802	3283
## [1195] {il,md}	=> {nj}	0.09439062	0.8785122	6.336693	3283
## [1196] {il,mi,oh}	=> {ny}	0.09439062	0.9442048	5.688617	3283
## [1197] {mi,ny,oh}	=> {il}	0.09439062	0.9279254	6.246211	3283
## [1198] {il,mi,ny}	=> {oh}	0.09439062	0.9450201	6.887834	3283
## [1199] {il,ny,oh}	=> {mi}	0.09439062	0.9059051	6.655742	3283
## [1200] {al,fl,ga,sc}	=> {nc}	0.09439062	0.9295017	5.455450	3283
## [1201] {al,fl,nc,sc}	=> {ga}	0.09439062	0.9817584	5.746641	3283
## [1202] {fl,ga,nc,sc}	=> {al}	0.09439062	0.9616286	5.865732	3283
## [1203] {al,fl,ga,nc}	=> {sc}	0.09439062	0.9791232	6.269308	3283
## [1204] {al,ga,nc,sc}	=> {fl}	0.09439062	0.8130263	4.270936	3283
## [1205] {ma,nj,oh}	=> {ny}	0.09436186	0.9882565	5.954019	3282
## [1206] {ma,nj,ny}	=> {oh}	0.09436186	0.8728723	6.361981	3282
## [1207] {nj,ny,oh}	=> {ma}	0.09436186	0.9229471	6.468069	3282
## [1208] {ma,ny,oh}	=> {nj}	0.09436186	0.9237264	6.662822	3282
## [1209] {il,mi,oh}	=> {pa}	0.09436186	0.9439172	5.997512	3282
## [1210] {mi,oh,pa}	=> {il}	0.09436186	0.9323864	6.276240	3282
## [1211] {il,mi,pa}	=> {oh}	0.09436186	0.9562937	6.970002	3282
## [1212] {il,oh,pa}	=> {mi}	0.09436186	0.8817840	6.478523	3282
## [1213] {ct,ma,oh,pa}	=> {ny}	0.09436186	0.9921403	5.977417	3282
## [1214] {ct,ma,ny,oh}	=> {pa}	0.09436186	0.9855856	6.262267	3282
## [1215] {ct,ma,ny,pa}	=> {oh}	0.09436186	0.8972116	6.539379	3282
## [1216] {ct,ny,oh,pa}	=> {ma}	0.09436186	0.9647266	6.760862	3282
## [1217] {ma,ny,oh,pa}	=> {ct}	0.09436186	0.9485549	7.513479	3282
## [1218] {va,wv}	=> {ny}	0.09433311	0.8726064	5.257253	3281
## [1219] {ny,wv}	=> {va}	0.09433311	0.9420040	5.811253	3281
## [1220] {ny,va}	=> {wv}	0.09433311	0.8023967	6.870546	3281
## [1221] {in,nj}	=> {oh}	0.09433311	0.9518422	6.937557	3281
## [1222] {in,oh}	=> {nj}	0.09433311	0.8402049	6.060383	3281
## [1223] {nj,oh}	=> {in}	0.09433311	0.8841283	6.925871	3281
## [1224] {mi,on,wi}	=> {ny}	0.09433311	0.9395762	5.660731	3281
## [1225] {mi,ny,wi}	=> {on}	0.09433311	0.9406537	6.455579	3281
## [1226] {ny,on,wi}	=> {mi}	0.09433311	0.9698492	7.125544	3281
## [1227] {mi,ny,on}	=> {wi}	0.09433311	0.8957139	7.209865	3281
## [1228] {la,ms,sc}	=> {nc}	0.09430436	0.9363403	5.495587	3280

## [1229] {la,ms,nc}	=> {sc}	0.09430436	0.9624413	6.162495	3280
## [1230] {ms,nc,sc}	=> {la}	0.09430436	0.8869659	5.985557	3280
## [1231] {la,nc,sc}	=> {ms}	0.09430436	0.9417169	6.802462	3280
## [1232] {ct,ma,on}	=> {ny}	0.09430436	0.9852809	5.936091	3280
## [1233] {ct,ma,ny}	=> {on}	0.09430436	0.8455788	5.803093	3280
## [1234] {ct,ny,on}	=> {ma}	0.09430436	0.9655578	6.766687	3280
## [1235] {ma,ny,on}	=> {ct}	0.09430436	0.9273396	7.345433	3280
## [1236] {nj,wv}	=> {pa}	0.09424686	0.9814371	6.235909	3278
## [1237] {pa,wv}	=> {nj}	0.09424686	0.8842730	6.378245	3278
## [1238] {nj,pa}	=> {wv}	0.09424686	0.7714756	6.605784	3278
## [1239] {ma,md,nj}	=> {pa}	0.09424686	0.9681040	6.151192	3278
## [1240] {ma,nj,pa}	=> {md}	0.09424686	0.8961181	6.101778	3278
## [1241] {md,nj,pa}	=> {ma}	0.09424686	0.8788204	6.158826	3278
## [1242] {ma,md,pa}	=> {nj}	0.09424686	0.9457588	6.821741	3278
## [1243] {il,pa,va}	=> {ny}	0.09424686	0.9272984	5.586760	3278
## [1244] {il,ny,va}	=> {pa}	0.09424686	0.9718352	6.174899	3278
## [1245] {ny,pa,va}	=> {il}	0.09424686	0.8556513	5.759707	3278
## [1246] {il,ny,pa}	=> {va}	0.09424686	0.8826064	5.444826	3278
## [1247] {nj,on}	=> {pa}	0.09421811	0.9678086	6.149315	3277
## [1248] {nj,pa}	=> {on}	0.09421811	0.7712403	5.292918	3277
## [1249] {on,pa}	=> {nj}	0.09421811	0.8717744	6.288093	3277
## [1250] {al,ga,ms}	=> {va}	0.09421811	0.8093356	4.992817	3277
## [1251] {al,ms,va}	=> {ga}	0.09421811	0.9663816	5.656634	3277
## [1252] {ga,ms,va}	=> {al}	0.09421811	0.9709630	5.922670	3277
## [1253] {al,ga,va}	=> {ms}	0.09421811	0.8651003	6.249025	3277
## [1254] {md,oh,va}	=> {ny}	0.09421811	0.9262295	5.580320	3277
## [1255] {md,ny,oh}	=> {va}	0.09421811	0.9449250	5.829272	3277
## [1256] {ny,oh,va}	=> {md}	0.09421811	0.9360183	6.373464	3277
## [1257] {md,ny,va}	=> {oh}	0.09421811	0.8832884	6.437899	3277
## [1258] {ct,on}	=> {pa}	0.09418936	0.9440922	5.998625	3276
## [1259] {ct,pa}	=> {on}	0.09418936	0.8314721	5.706281	3276
## [1260] {on,pa}	=> {ct}	0.09418936	0.8715084	6.903196	3276
## [1261] {ma,oh}	=> {il}	0.09418936	0.8965517	6.035023	3276
## [1262] {il,ma}	=> {oh}	0.09418936	0.9212598	6.714656	3276
## [1263] {il,oh}	=> {ma}	0.09418936	0.8019584	5.620172	3276
## [1264] {il,md,pa}	=> {ny}	0.09418936	0.9384131	5.653723	3276
## [1265] {il,md,ny}	=> {pa}	0.09418936	0.9776186	6.211647	3276
## [1266] {md,ny,pa}	=> {il}	0.09418936	0.8564706	5.765222	3276
## [1267] {il,ny,pa}	=> {md}	0.09418936	0.8820679	6.006108	3276
## [1268] {al,ga,la,sc}	=> {nc}	0.09416060	0.9446207	5.544187	3275
## [1269] {al,la,nc,sc}	=> {ga}	0.09416060	0.9837789	5.758468	3275
## [1270] {ga,la,nc,sc}	=> {al}	0.09416060	0.9700829	5.917302	3275
## [1271] {al,ga,la,nc}	=> {sc}	0.09416060	0.9758641	6.248441	3275
## [1272] {al,ga,nc,sc}	=> {la}	0.09416060	0.8110451	5.473217	3275
## [1273] {mo,tn}	=> {il}	0.09413185	0.9277416	6.244974	3274
## [1274] {il,mo}	=> {tn}	0.09413185	0.8228198	5.840509	3274
## [1275] {il,tn}	=> {mo}	0.09413185	0.8860622	6.644703	3274
## [1276] {al,sc,tn}	=> {nc}	0.09413185	0.9712252	5.700334	3274
## [1277] {al,nc,sc}	=> {tn}	0.09413185	0.7892960	5.602552	3274
## [1278] {nc,sc,tn}	=> {al}	0.09413185	0.9145251	5.578411	3274
## [1279] {al,nc,tn}	=> {sc}	0.09413185	0.9290579	5.948741	3274
## [1280] {ma,md,va}	=> {ny}	0.09413185	0.9773134	5.888089	3274
## [1281] {ma,md,ny}	=> {va}	0.09413185	0.9264290	5.715170	3274
## [1282] {ma,ny,va}	=> {md}	0.09413185	0.9298495	6.331459	3274

## [1283] {md,ny,va}	=> {ma}	0.09413185	0.8824798	6.184471	3274
## [1284] {ga,md,sc}	=> {nc}	0.09410310	0.9882246	5.800108	3273
## [1285] {md,nc,sc}	=> {ga}	0.09410310	0.9484207	5.551502	3273
## [1286] {ga,md,nc}	=> {sc}	0.09410310	0.9217122	5.901707	3273
## [1287] {il,on}	=> {pa}	0.09407435	0.9137113	5.805588	3272
## [1288] {on,pa}	=> {il}	0.09407435	0.8704443	5.859284	3272
## [1289] {il,pa}	=> {on}	0.09407435	0.8079012	5.544517	3272
## [1290] {ma,nj,oh}	=> {pa}	0.09407435	0.9852454	6.260106	3272
## [1291] {ma,nj,pa}	=> {oh}	0.09407435	0.8944779	6.519454	3272
## [1292] {nj,oh,pa}	=> {ma}	0.09407435	0.9051176	6.343118	3272
## [1293] {ma,oh,pa}	=> {nj}	0.09407435	0.9282270	6.695284	3272
## [1294] {fl,la}	=> {tx}	0.09401685	0.8504551	3.486936	3270
## [1295] {fl,tx}	=> {la}	0.09401685	0.8958904	6.045783	3270
## [1296] {la,tx}	=> {fl}	0.09401685	0.7778306	4.086049	3270
## [1297] {md,nc}	=> {il}	0.09401685	0.7856800	5.288704	3270
## [1298] {il,md}	=> {nc}	0.09401685	0.8750334	5.135764	3270
## [1299] {il,nc}	=> {md}	0.09401685	0.9053156	6.164405	3270
## [1300] {oh,tn}	=> {il}	0.09398810	0.9174853	6.175935	3269
## [1301] {il,tn}	=> {oh}	0.09398810	0.8847091	6.448254	3269
## [1302] {il,oh}	=> {tn}	0.09398810	0.8002448	5.680268	3269
## [1303] {mi,wi}	=> {oh}	0.09395935	0.8563941	6.241879	3268
## [1304] {oh,wi}	=> {mi}	0.09395935	0.9475210	6.961497	3268
## [1305] {mi,oh}	=> {wi}	0.09395935	0.8696115	6.999759	3268
## [1306] {ky,tn}	=> {in}	0.09393059	0.8196187	6.420531	3267
## [1307] {in,ky}	=> {tn}	0.09393059	0.9174389	6.512131	3267
## [1308] {in,tn}	=> {ky}	0.09393059	0.9406853	7.182870	3267
## [1309] {ar,mo}	=> {il}	0.09390184	0.8913755	6.000181	3266
## [1310] {ar,il}	=> {mo}	0.09390184	0.9519091	7.138497	3266
## [1311] {il,mo}	=> {ar}	0.09390184	0.8208092	6.192748	3266
## [1312] {oh,on}	=> {il}	0.09390184	0.9161290	6.166805	3266
## [1313] {il,oh}	=> {on}	0.09390184	0.7995104	5.486932	3266
## [1314] {il,on}	=> {oh}	0.09390184	0.9120357	6.647426	3266
## [1315] {al,md,nc}	=> {va}	0.09390184	0.9822556	6.059566	3266
## [1316] {al,md,va}	=> {nc}	0.09390184	0.9708680	5.698238	3266
## [1317] {al,nc,va}	=> {md}	0.09390184	0.8452381	5.755330	3266
## [1318] {md,nc,va}	=> {al}	0.09390184	0.8112270	4.948314	3266
## [1319] {in,oh,va}	=> {pa}	0.09390184	0.9555295	6.071296	3266
## [1320] {in,oh,pa}	=> {va}	0.09390184	0.9087368	5.606026	3266
## [1321] {in,pa,va}	=> {oh}	0.09390184	0.9634218	7.021956	3266
## [1322] {oh,pa,va}	=> {in}	0.09390184	0.8896758	6.969328	3266
## [1323] {nc,tn}	=> {il}	0.09387309	0.7760875	5.224134	3265
## [1324] {il,tn}	=> {nc}	0.09387309	0.8836265	5.186199	3265
## [1325] {il,nc}	=> {tn}	0.09387309	0.9039313	6.416252	3265
## [1326] {ar,ga}	=> {nc}	0.09384434	0.9153113	5.372164	3264
## [1327] {ar,nc}	=> {ga}	0.09384434	0.9379310	5.490101	3264
## [1328] {ky,mo}	=> {tn}	0.09378684	0.9180974	6.516805	3262
## [1329] {ky,tn}	=> {mo}	0.09378684	0.8183643	6.137026	3262
## [1330] {mo,tn}	=> {ky}	0.09378684	0.9243412	7.058070	3262
## [1331] {oh,va,wv}	=> {pa}	0.09378684	0.9653744	6.133848	3262
## [1332] {oh,pa,wv}	=> {va}	0.09378684	0.9563178	5.899555	3262
## [1333] {pa,va,wv}	=> {oh}	0.09378684	0.9336005	6.804601	3262
## [1334] {oh,pa,va}	=> {wv}	0.09378684	0.8885862	7.608547	3262
## [1335] {ct,nj,va}	=> {ny}	0.09378684	0.9846061	5.932026	3262
## [1336] {ct,nj,ny}	=> {va}	0.09378684	0.8883442	5.480224	3262

## [1337] {ct,ny,va}	=> {nj}	0.09378684	0.9490835	6.845722	3262
## [1338] {nj,ny,va}	=> {ct}	0.09378684	0.8885862	7.038469	3262
## [1339] {in,mi,oh}	=> {il}	0.09378684	0.9711224	6.536986	3262
## [1340] {il,in,mi}	=> {oh}	0.09378684	0.9549180	6.959976	3262
## [1341] {il,in,oh}	=> {mi}	0.09378684	0.8759398	6.435586	3262
## [1342] {il,mi,oh}	=> {in}	0.09378684	0.9381651	7.349171	3262
## [1343] {ma,nh}	=> {ny}	0.09375809	0.9807519	5.908805	3261
## [1344] {nh,ny}	=> {ma}	0.09375809	0.9443962	6.618385	3261
## [1345] {ct,il,pa}	=> {ny}	0.09375809	0.9848988	5.933789	3261
## [1346] {ct,il,ny}	=> {pa}	0.09375809	0.9728520	6.181360	3261
## [1347] {ct,ny,pa}	=> {il}	0.09375809	0.8489977	5.714919	3261
## [1348] {il,ny,pa}	=> {ct}	0.09375809	0.8780291	6.954846	3261
## [1349] {ma,wi}	=> {ny}	0.09372933	0.9734249	5.864662	3260
## [1350] {ny,wi}	=> {ma}	0.09372933	0.8789431	6.159686	3260
## [1351] {il,wi}	=> {ny}	0.09372933	0.8946213	5.389888	3260
## [1352] {ny,wi}	=> {il}	0.09372933	0.8789431	5.916493	3260
## [1353] {il,ny}	=> {wi}	0.09372933	0.8180678	6.584868	3260
## [1354] {fl,la,ms}	=> {ga}	0.09370058	0.9495921	5.558358	3259
## [1355] {fl,ga,ms}	=> {la}	0.09370058	0.9211419	6.216189	3259
## [1356] {fl,ga,la}	=> {ms}	0.09370058	0.9429977	6.811714	3259
## [1357] {ga,la,ms}	=> {fl}	0.09370058	0.8884951	4.667384	3259
## [1358] {al,md}	=> {ga}	0.09367183	0.9332569	5.462741	3258
## [1359] {ga,md}	=> {al}	0.09367183	0.8894349	5.425366	3258
## [1360] {mi,va}	=> {pa}	0.09364308	0.9641800	6.126259	3257
## [1361] {mi,pa}	=> {va}	0.09364308	0.8418196	5.193212	3257
## [1362] {pa,va}	=> {mi}	0.09364308	0.7608036	5.589672	3257
## [1363] {ms,nc,sc}	=> {va}	0.09364308	0.8807463	5.433352	3257
## [1364] {ms,sc,va}	=> {nc}	0.09364308	0.9819114	5.763054	3257
## [1365] {ms,nc,va}	=> {sc}	0.09364308	0.9517826	6.094247	3257
## [1366] {nc,sc,va}	=> {ms}	0.09364308	0.8006391	5.783391	3257
## [1367] {ky,md,va}	=> {pa}	0.09364308	0.9271278	5.890835	3257
## [1368] {ky,md,pa}	=> {va}	0.09364308	0.9728196	6.001355	3257
## [1369] {ky,pa,va}	=> {md}	0.09364308	0.9479045	6.454399	3257
## [1370] {md,pa,va}	=> {ky}	0.09364308	0.8368448	6.389967	3257
## [1371] {il,nj,oh}	=> {ny}	0.09364308	0.9636095	5.805526	3257
## [1372] {nj,ny,oh}	=> {il}	0.09364308	0.9159168	6.165377	3257
## [1373] {il,nj,ny}	=> {oh}	0.09364308	0.9446056	6.884813	3257
## [1374] {il,ny,oh}	=> {nj}	0.09364308	0.8987307	6.482528	3257
## [1375] {nc,oh,va}	=> {pa}	0.09364308	0.9548519	6.066990	3257
## [1376] {nc,oh,pa}	=> {va}	0.09364308	0.9687686	5.976364	3257
## [1377] {oh,pa,va}	=> {nc}	0.09364308	0.8872242	5.207314	3257
## [1378] {nc,pa,va}	=> {oh}	0.09364308	0.8683018	6.328668	3257
## [1379] {il,ky}	=> {pa}	0.09361433	0.8648074	5.494861	3256
## [1380] {ky,pa}	=> {il}	0.09361433	0.8908345	5.996538	3256
## [1381] {il,pa}	=> {ky}	0.09361433	0.8039506	6.138794	3256
## [1382] {in,wi}	=> {il}	0.09361433	0.9713604	6.538588	3256
## [1383] {il,wi}	=> {in}	0.09361433	0.8935236	6.999469	3256
## [1384] {il,in}	=> {wi}	0.09361433	0.7876149	6.339744	3256
## [1385] {in,ky}	=> {va}	0.09358558	0.9140691	5.638921	3255
## [1386] {ky,va}	=> {in}	0.09358558	0.8265617	6.474920	3255
## [1387] {in,va}	=> {ky}	0.09358558	0.8910485	6.803854	3255
## [1388] {ma,nj,va}	=> {pa}	0.09358558	0.9644444	6.127940	3255
## [1389] {ma,nj,pa}	=> {va}	0.09358558	0.8898305	5.489393	3255
## [1390] {nj,pa,va}	=> {ma}	0.09358558	0.8757062	6.137001	3255

## [1391]	{ma,pa,va}	=> {nj}	0.09358558	0.9377701	6.764119	3255
## [1392]	{ga,ms}	=> {tx}	0.09352808	0.7710358	3.161310	3253
## [1393]	{ms,tx}	=> {ga}	0.09352808	0.8887978	5.202504	3253
## [1394]	{ga,tx}	=> {ms}	0.09352808	0.9006091	6.505521	3253
## [1395]	{md,wv}	=> {nc}	0.09352808	0.9001107	5.282948	3253
## [1396]	{nc,wv}	=> {md}	0.09352808	0.9334290	6.355833	3253
## [1397]	{md,nc}	=> {wv}	0.09352808	0.7815954	6.692435	3253
## [1398]	{ga,ky,nc}	=> {va}	0.09352808	0.9730781	6.002949	3253
## [1399]	{ga,ky,va}	=> {nc}	0.09352808	0.9739521	5.716339	3253
## [1400]	{ky,nc,va}	=> {ga}	0.09352808	0.9001107	5.268723	3253
## [1401]	{ga,nc,va}	=> {ky}	0.09352808	0.7887973	6.023086	3253
## [1402]	{ar,ms}	=> {al}	0.09349932	0.9374459	5.718223	3252
## [1403]	{al,ar}	=> {ms}	0.09349932	0.8983425	6.489149	3252
## [1404]	{oh,wi}	=> {il}	0.09349932	0.9428820	6.346890	3252
## [1405]	{il,wi}	=> {oh}	0.09349932	0.8924259	6.504498	3252
## [1406]	{il,oh}	=> {wi}	0.09349932	0.7960832	6.407908	3252
## [1407]	{in,nc}	=> {va}	0.09349932	0.9675692	5.968965	3252
## [1408]	{in,va}	=> {nc}	0.09349932	0.8902272	5.224940	3252
## [1409]	{al,fl,ms,sc}	=> {ga}	0.09349932	0.9827743	5.752587	3252
## [1410]	{fl,ga,ms,sc}	=> {al}	0.09349932	0.9818841	5.989286	3252
## [1411]	{al,fl,ga,ms}	=> {sc}	0.09349932	0.9420626	6.032010	3252
## [1412]	{al,fl,ga,sc}	=> {ms}	0.09349932	0.9207248	6.650826	3252
## [1413]	{al,ga,ms,sc}	=> {fl}	0.09349932	0.8744286	4.593491	3252
## [1414]	{ct,ma}	=> {il}	0.09347057	0.8129532	5.472291	3251
## [1415]	{ct,il}	=> {ma}	0.09347057	0.9475372	6.640397	3251
## [1416]	{il,ma}	=> {ct}	0.09347057	0.9142295	7.241589	3251
## [1417]	{ma,mi}	=> {oh}	0.09347057	0.8941144	6.516805	3251
## [1418]	{ma,oh}	=> {mi}	0.09347057	0.8897099	6.536755	3251
## [1419]	{mi,oh}	=> {ma}	0.09347057	0.8650878	6.062587	3251
## [1420]	{oh,wv}	=> {ny}	0.09344182	0.9136913	5.504780	3250
## [1421]	{ny,wv}	=> {oh}	0.09344182	0.9331036	6.800980	3250
## [1422]	{ny,oh}	=> {wv}	0.09344182	0.7926829	6.787372	3250
## [1423]	{ct,ma,md}	=> {pa}	0.09344182	0.9721807	6.177095	3250
## [1424]	{ct,ma,pa}	=> {md}	0.09344182	0.8753030	5.960046	3250
## [1425]	{ct,md,pa}	=> {ma}	0.09344182	0.9561636	6.700851	3250
## [1426]	{ma,md,pa}	=> {ct}	0.09344182	0.9376803	7.427342	3250
## [1427]	{al,la,ms}	=> {tx}	0.09341307	0.8624900	3.536280	3249
## [1428]	{la,ms,tx}	=> {al}	0.09341307	0.9317465	5.683457	3249
## [1429]	{al,ms,tx}	=> {la}	0.09341307	0.9643811	6.507982	3249
## [1430]	{al,la,tx}	=> {ms}	0.09341307	0.9382039	6.777086	3249
## [1431]	{ma,mi,on}	=> {ny}	0.09341307	0.9842472	5.929863	3249
## [1432]	{ma,mi,ny}	=> {on}	0.09341307	0.9177966	6.298714	3249
## [1433]	{ma,ny,on}	=> {mi}	0.09341307	0.9185751	6.748830	3249
## [1434]	{mi,ny,on}	=> {ma}	0.09341307	0.8869779	6.215994	3249
## [1435]	{al,ga,nc,tn}	=> {va}	0.09341307	0.9595393	5.919428	3249
## [1436]	{al,ga,tn,va}	=> {nc}	0.09341307	0.9780253	5.740246	3249
## [1437]	{al,ga,nc,va}	=> {tn}	0.09341307	0.8795344	6.243079	3249
## [1438]	{al,nc,tn,va}	=> {ga}	0.09341307	0.9635231	5.639902	3249
## [1439]	{ga,nc,tn,va}	=> {al}	0.09341307	0.9128969	5.568479	3249
## [1440]	{md,nc,nj}	=> {ny}	0.09338432	0.9206349	5.546614	3248
## [1441]	{md,nj,ny}	=> {nc}	0.09338432	0.8809330	5.170390	3248
## [1442]	{nc,nj,ny}	=> {md}	0.09338432	0.9595273	6.533540	3248
## [1443]	{md,nc,ny}	=> {nj}	0.09338432	0.9419954	6.794596	3248
## [1444]	{nc,nj,pa}	=> {ny}	0.09338432	0.9441860	5.688504	3248

## [1445] {nc,nj,ny}	=> {pa}	0.09338432	0.9595273	6.096697	3248
## [1446] {nj,ny,pa}	=> {nc}	0.09338432	0.8150565	4.783746	3248
## [1447] {nc,ny,pa}	=> {nj}	0.09338432	0.9240398	6.665083	3248
## [1448] {ga,md,sc}	=> {va}	0.09335557	0.9803744	6.047961	3247
## [1449] {ga,sc,va}	=> {md}	0.09335557	0.8364245	5.695317	3247
## [1450] {md,sc,va}	=> {ga}	0.09335557	0.9455446	5.534666	3247
## [1451] {ga,md,va}	=> {sc}	0.09335557	0.9131046	5.846593	3247
## [1452] {ms,tn}	=> {al}	0.09332682	0.9505124	5.797926	3246
## [1453] {al,tn}	=> {ms}	0.09332682	0.8365979	6.043139	3246
## [1454] {ky,nc}	=> {pa}	0.09332682	0.8614650	5.473623	3246
## [1455] {ky,pa}	=> {nc}	0.09332682	0.8880985	5.212446	3246
## [1456] {nc,pa}	=> {ky}	0.09332682	0.8219802	6.276464	3246
## [1457] {id,wy}	=> {mt}	0.09329807	0.9373195	6.791856	3245
## [1458] {mt,wy}	=> {id}	0.09329807	0.8496989	5.762015	3245
## [1459] {id,mt}	=> {wy}	0.09329807	0.8307732	6.134845	3245
## [1460] {ct,nj,oh}	=> {ny}	0.09329807	0.9884252	5.955035	3245
## [1461] {ct,nj,ny}	=> {oh}	0.09329807	0.8837146	6.441005	3245
## [1462] {ct,ny,oh}	=> {nj}	0.09329807	0.9340818	6.737515	3245
## [1463] {nj,ny,oh}	=> {ct}	0.09329807	0.9125422	7.228224	3245
## [1464] {fl,ms}	=> {nc}	0.09326931	0.8607058	5.051672	3244
## [1465] {fl,nc}	=> {ms}	0.09326931	0.8777056	6.340079	3244
## [1466] {ms,nc}	=> {fl}	0.09326931	0.8292434	4.356126	3244
## [1467] {ar,la}	=> {tx}	0.09326931	0.9074126	3.720466	3244
## [1468] {la,tx}	=> {ar}	0.09326931	0.7716461	5.821827	3244
## [1469] {ar,tx}	=> {la}	0.09326931	0.8844057	5.968280	3244
## [1470] {ky,oh}	=> {md}	0.09326931	0.8894982	6.056703	3244
## [1471] {ky,md}	=> {oh}	0.09326931	0.8941566	6.517112	3244
## [1472] {md,oh}	=> {ky}	0.09326931	0.8618491	6.580894	3244
## [1473] {nj,on,pa}	=> {ny}	0.09326931	0.9899298	5.964100	3244
## [1474] {nj,ny,on}	=> {pa}	0.09326931	0.9738817	6.187903	3244
## [1475] {nj,ny,pa}	=> {on}	0.09326931	0.8140527	5.586734	3244
## [1476] {ny,on,pa}	=> {nj}	0.09326931	0.8941566	6.449535	3244
## [1477] {ma,md,nj,pa}	=> {ny}	0.09326931	0.9896278	5.962280	3244
## [1478] {ma,md,nj,ny}	=> {pa}	0.09326931	0.9727136	6.180481	3244
## [1479] {ma,nj,ny,pa}	=> {md}	0.09326931	0.9018627	6.140894	3244
## [1480] {md,nj,ny,pa}	=> {ma}	0.09326931	0.9138028	6.403985	3244
## [1481] {ma,md,ny,pa}	=> {nj}	0.09326931	0.9532765	6.875967	3244
## [1482] {ma,vt}	=> {ny}	0.09324056	0.9788711	5.897474	3243
## [1483] {ny,vt}	=> {ma}	0.09324056	0.9239316	6.474968	3243
## [1484] {nc,wv}	=> {pa}	0.09324056	0.9305595	5.912640	3243
## [1485] {pa,wv}	=> {nc}	0.09324056	0.8748314	5.134578	3243
## [1486] {nc,pa}	=> {wv}	0.09324056	0.8212206	7.031726	3243
## [1487] {in,tn}	=> {va}	0.09324056	0.9337748	5.760486	3243
## [1488] {tn,va}	=> {in}	0.09324056	0.7670293	6.008569	3243
## [1489] {in,va}	=> {tn}	0.09324056	0.8877635	6.301490	3243
## [1490] {il,in,va}	=> {pa}	0.09324056	0.9329689	5.927949	3243
## [1491] {in,pa,va}	=> {il}	0.09324056	0.9566372	6.439481	3243
## [1492] {il,in,pa}	=> {va}	0.09324056	0.9053601	5.585195	3243
## [1493] {il,pa,va}	=> {in}	0.09324056	0.9173975	7.186487	3243
## [1494] {mi,oh,on}	=> {ny}	0.09324056	0.9689274	5.837565	3243
## [1495] {mi,ny,oh}	=> {on}	0.09324056	0.9166196	6.290636	3243
## [1496] {mi,ny,on}	=> {oh}	0.09324056	0.8853399	6.452851	3243
## [1497] {ny,oh,on}	=> {mi}	0.09324056	0.9493560	6.974979	3243
## [1498] {md,oh,va}	=> {il}	0.09324056	0.9166196	6.170107	3243

## [1499]	{il,md,oh}	=> {va}	0.09324056	0.9510264	5.866912	3243
## [1500]	{il,oh,va}	=> {md}	0.09324056	0.9260423	6.305536	3243
## [1501]	{il,md,va}	=> {oh}	0.09324056	0.9252496	6.743736	3243
## [1502]	{ga,ky,tn}	=> {va}	0.09321181	0.9485079	5.851375	3242
## [1503]	{ga,ky,va}	=> {tn}	0.09321181	0.9706587	6.889894	3242
## [1504]	{ky,tn,va}	=> {ga}	0.09321181	0.8889498	5.203393	3242
## [1505]	{ga,tn,va}	=> {ky}	0.09321181	0.8887061	6.785969	3242
## [1506]	{ct,md,nj}	=> {pa}	0.09321181	0.9744515	6.191523	3242
## [1507]	{ct,nj,pa}	=> {md}	0.09321181	0.9043236	6.157650	3242
## [1508]	{ct,md,pa}	=> {nj}	0.09321181	0.9538099	6.879814	3242
## [1509]	{md,nj,pa}	=> {ct}	0.09321181	0.8691689	6.884665	3242
## [1510]	{md,nc,nj,va}	=> {pa}	0.09318306	0.9367052	5.951689	3241
## [1511]	{md,nc,nj,pa}	=> {va}	0.09318306	0.9842089	6.071616	3241
## [1512]	{md,nj,pa,va}	=> {nc}	0.09318306	0.9186508	5.391764	3241
## [1513]	{nc,nj,pa,va}	=> {md}	0.09318306	0.9703593	6.607296	3241
## [1514]	{md,nc,pa,va}	=> {nj}	0.09318306	0.9176104	6.618708	3241
## [1515]	{ar,nc}	=> {va}	0.09315431	0.9310345	5.743581	3240
## [1516]	{ar,va}	=> {nc}	0.09315431	0.9361456	5.494445	3240
## [1517]	{on,qc}	=> {ny}	0.09315431	0.8490566	5.115371	3240
## [1518]	{ny,qc}	=> {on}	0.09315431	0.9577298	6.572771	3240
## [1519]	{ny,on}	=> {qc}	0.09315431	0.7914021	6.443295	3240
## [1520]	{ga,tn}	=> {md}	0.09315431	0.8142749	5.544498	3240
## [1521]	{ga,md}	=> {tn}	0.09315431	0.8845209	6.278474	3240
## [1522]	{md,tn}	=> {ga}	0.09315431	0.8646918	5.061401	3240
## [1523]	{ct,on,pa}	=> {ny}	0.09315431	0.9890110	5.958564	3240
## [1524]	{ct,ny,on}	=> {pa}	0.09315431	0.9537827	6.060197	3240
## [1525]	{ct,ny,pa}	=> {on}	0.09315431	0.8435303	5.789035	3240
## [1526]	{ny,on,pa}	=> {ct}	0.09315431	0.8930540	7.073858	3240
## [1527]	{ma,nj,oh,pa}	=> {ny}	0.09315431	0.9902200	5.965849	3240
## [1528]	{ma,nj,ny,oh}	=> {pa}	0.09315431	0.9872029	6.272544	3240
## [1529]	{ma,nj,ny,pa}	=> {oh}	0.09315431	0.9007506	6.565173	3240
## [1530]	{nj,ny,oh,pa}	=> {ma}	0.09315431	0.9281008	6.504186	3240
## [1531]	{ma,ny,oh,pa}	=> {nj}	0.09315431	0.9364162	6.754353	3240
## [1532]	{oh,wv}	=> {il}	0.09312556	0.9105988	6.129580	3239
## [1533]	{il,wv}	=> {oh}	0.09312556	0.9551755	6.961852	3239
## [1534]	{il,oh}	=> {wv}	0.09312556	0.7929009	6.789238	3239
## [1535]	{md,mi}	=> {pa}	0.09312556	0.9686005	6.154347	3239
## [1536]	{mi,pa}	=> {md}	0.09312556	0.8371672	5.700375	3239
## [1537]	{md,pa}	=> {mi}	0.09312556	0.7677175	5.640469	3239
## [1538]	{il,nc}	=> {pa}	0.09312556	0.8967331	5.697712	3239
## [1539]	{nc,pa}	=> {il}	0.09312556	0.8202076	5.521123	3239
## [1540]	{il,pa}	=> {nc}	0.09312556	0.7997531	4.693927	3239
## [1541]	{ct,ma,mi}	=> {pa}	0.09312556	0.9680215	6.150668	3239
## [1542]	{ct,ma,pa}	=> {mi}	0.09312556	0.8723404	6.409141	3239
## [1543]	{ct,mi,pa}	=> {ma}	0.09312556	0.9680215	6.783953	3239
## [1544]	{ma,mi,pa}	=> {ct}	0.09312556	0.9451415	7.486442	3239
## [1545]	{il,in,oh,pa}	=> {ny}	0.09312556	0.9418436	5.674391	3239
## [1546]	{il,in,ny,oh}	=> {pa}	0.09312556	0.9697605	6.161717	3239
## [1547]	{in,ny,oh,pa}	=> {il}	0.09312556	0.9605575	6.465870	3239
## [1548]	{il,in,ny,pa}	=> {oh}	0.09312556	0.9703415	7.072391	3239
## [1549]	{il,ny,oh,pa}	=> {in}	0.09312556	0.9299454	7.284782	3239
## [1550]	{ky,sc}	=> {nc}	0.09309681	0.9685911	5.684875	3238
## [1551]	{ky,nc}	=> {sc}	0.09309681	0.8593418	5.502351	3238
## [1552]	{oh,wi}	=> {ny}	0.09309681	0.9388228	5.656192	3238

## [1553]	{ny,wi}	=> {oh}	0.09309681	0.8730116	6.362996	3238
## [1554]	{ny,oh}	=> {wi}	0.09309681	0.7897561	6.356979	3238
## [1555]	{ga,ky,tn}	=> {nc}	0.09309681	0.9473376	5.560133	3238
## [1556]	{ga,ky,nc}	=> {tn}	0.09309681	0.9685911	6.875218	3238
## [1557]	{ky,nc,tn}	=> {ga}	0.09309681	0.9108298	5.331466	3238
## [1558]	{ga,nc,tn}	=> {ky}	0.09309681	0.8694952	6.639278	3238
## [1559]	{ct,nj,oh}	=> {pa}	0.09309681	0.9862930	6.266762	3238
## [1560]	{ct,nj,pa}	=> {oh}	0.09309681	0.9032078	6.583083	3238
## [1561]	{ct,oh,pa}	=> {nj}	0.09309681	0.9369213	6.757997	3238
## [1562]	{nj,oh,pa}	=> {ct}	0.09309681	0.8957123	7.094915	3238
## [1563]	{md,oh,pa,va}	=> {ny}	0.09309681	0.9440233	5.687524	3238
## [1564]	{md,ny,oh,va}	=> {pa}	0.09309681	0.9880989	6.278237	3238
## [1565]	{md,ny,oh,pa}	=> {va}	0.09309681	0.9490035	5.854433	3238
## [1566]	{ny,oh,pa,va}	=> {md}	0.09309681	0.9451255	6.435476	3238
## [1567]	{md,ny,pa,va}	=> {oh}	0.09309681	0.9108298	6.638636	3238
## [1568]	{md,wv}	=> {ny}	0.09306805	0.8956835	5.396287	3237
## [1569]	{ny,wv}	=> {md}	0.09306805	0.9293712	6.328203	3237
## [1570]	{md,ny}	=> {wv}	0.09306805	0.7982737	6.835243	3237
## [1571]	{ga,pa}	=> {nc}	0.09306805	0.9611045	5.640934	3237
## [1572]	{nc,pa}	=> {ga}	0.09306805	0.8197012	4.798052	3237
## [1573]	{in,md,oh}	=> {pa}	0.09306805	0.9717802	6.174550	3237
## [1574]	{in,oh,pa}	=> {md}	0.09306805	0.9006678	6.132758	3237
## [1575]	{in,md,pa}	=> {oh}	0.09306805	0.9642538	7.028020	3237
## [1576]	{md,oh,pa}	=> {in}	0.09306805	0.8937051	7.000892	3237
## [1577]	{ma,nj}	=> {mi}	0.09303930	0.8387766	6.162545	3236
## [1578]	{mi,nj}	=> {ma}	0.09303930	0.9306874	6.522313	3236
## [1579]	{ma,mi}	=> {nj}	0.09303930	0.8899890	6.419475	3236
## [1580]	{md,nj,oh}	=> {ny}	0.09303930	0.9639559	5.807613	3236
## [1581]	{nj,ny,oh}	=> {md}	0.09303930	0.9100112	6.196378	3236
## [1582]	{md,nj,ny}	=> {oh}	0.09303930	0.8776783	6.397010	3236
## [1583]	{md,ny,oh}	=> {nj}	0.09303930	0.9331027	6.730453	3236
## [1584]	{ga,va}	=> {pa}	0.09301055	0.7609974	4.835267	3235
## [1585]	{ga,pa}	=> {va}	0.09301055	0.9605107	5.925421	3235
## [1586]	{pa,va}	=> {ga}	0.09301055	0.7556646	4.423219	3235
## [1587]	{ga,ms,sc}	=> {va}	0.09301055	0.8453096	5.214742	3235
## [1588]	{ms,sc,va}	=> {ga}	0.09301055	0.9752789	5.708713	3235
## [1589]	{ga,ms,va}	=> {sc}	0.09301055	0.9585185	6.137377	3235
## [1590]	{ga,sc,va}	=> {ms}	0.09301055	0.8333333	6.019557	3235
## [1591]	{mt,wa}	=> {or}	0.09298180	0.9148515	4.527526	3234
## [1592]	{mt,or}	=> {wa}	0.09298180	0.9253219	5.692186	3234
## [1593]	{la,nc}	=> {va}	0.09298180	0.8738179	5.390610	3234
## [1594]	{la,va}	=> {nc}	0.09298180	0.9492222	5.571194	3234
## [1595]	{il,mo}	=> {pa}	0.09298180	0.8127670	5.164204	3234
## [1596]	{mo,pa}	=> {il}	0.09298180	0.9590747	6.455889	3234
## [1597]	{il,pa}	=> {mo}	0.09298180	0.7985185	5.988200	3234
## [1598]	{md,oh,wv}	=> {pa}	0.09298180	0.9755656	6.198602	3234
## [1599]	{oh,pa,wv}	=> {md}	0.09298180	0.9481091	6.455791	3234
## [1600]	{md,pa,wv}	=> {oh}	0.09298180	0.9368482	6.828273	3234
## [1601]	{md,oh,pa}	=> {wv}	0.09298180	0.8928769	7.645286	3234
## [1602]	{ct,ma,va}	=> {pa}	0.09298180	0.9700060	6.163277	3234
## [1603]	{ct,ma,pa}	=> {va}	0.09298180	0.8709938	5.373188	3234
## [1604]	{ct,pa,va}	=> {ma}	0.09298180	0.9551093	6.693463	3234
## [1605]	{ma,pa,va}	=> {ct}	0.09298180	0.9317200	7.380130	3234
## [1606]	{md,nc,pa,va}	=> {ny}	0.09295305	0.9153454	5.514746	3233

## [1607]	{md,nc,ny,va}	=> {pa}	0.09295305	0.9599169	6.099172	3233
## [1608]	{md,nc,ny,pa}	=> {va}	0.09295305	0.9808859	6.051116	3233
## [1609]	{md,ny,pa,va}	=> {nc}	0.09295305	0.9094233	5.337606	3233
## [1610]	{nc,ny,pa,va}	=> {md}	0.09295305	0.9562260	6.511060	3233
## [1611]	{in,nj,pa}	=> {ny}	0.09292430	0.9691154	5.838698	3232
## [1612]	{in,nj,ny}	=> {pa}	0.09292430	0.9805825	6.230479	3232
## [1613]	{in,ny,pa}	=> {nj}	0.09292430	0.9221113	6.651172	3232
## [1614]	{nj,ny,pa}	=> {in}	0.09292430	0.8110414	6.353340	3232
## [1615]	{il,wv}	=> {pa}	0.09286680	0.9525214	6.052182	3230
## [1616]	{pa,wv}	=> {il}	0.09286680	0.8713245	5.865210	3230
## [1617]	{il,pa}	=> {wv}	0.09286680	0.7975309	6.828883	3230
## [1618]	{mi,nj}	=> {oh}	0.09286680	0.9289617	6.770792	3230
## [1619]	{nj,oh}	=> {mi}	0.09286680	0.8703853	6.394777	3230
## [1620]	{mi,oh}	=> {nj}	0.09286680	0.8594997	6.199556	3230
## [1621]	{in,md,va}	=> {il}	0.09286680	0.9593110	6.457479	3230
## [1622]	{il,in,md}	=> {va}	0.09286680	0.9581726	5.910997	3230
## [1623]	{il,in,va}	=> {md}	0.09286680	0.9292290	6.327234	3230
## [1624]	{il,md,va}	=> {in}	0.09286680	0.9215407	7.218943	3230
## [1625]	{ma,md,va}	=> {pa}	0.09286680	0.9641791	6.126254	3230
## [1626]	{ma,md,pa}	=> {va}	0.09286680	0.9319100	5.748982	3230
## [1627]	{ma,pa,va}	=> {md}	0.09286680	0.9305676	6.336349	3230
## [1628]	{md,pa,va}	=> {ma}	0.09286680	0.8299075	5.816041	3230
## [1629]	{in,va}	=> {ny}	0.09283804	0.8839310	5.325481	3229
## [1630]	{in,ny}	=> {va}	0.09283804	0.8781615	5.417406	3229
## [1631]	{ny,va}	=> {in}	0.09283804	0.7896796	6.186002	3229
## [1632]	{sc,tx}	=> {ga}	0.09280929	0.9278528	5.431109	3228
## [1633]	{ga,tx}	=> {sc}	0.09280929	0.8936877	5.722267	3228
## [1634]	{nj,oh,va}	=> {ny}	0.09278054	0.9615614	5.793187	3227
## [1635]	{nj,ny,oh}	=> {va}	0.09278054	0.9074803	5.598275	3227
## [1636]	{nj,ny,va}	=> {oh}	0.09278054	0.8790520	6.407022	3227
## [1637]	{ny,oh,va}	=> {nj}	0.09278054	0.9217366	6.648470	3227
## [1638]	{la,sc}	=> {tx}	0.09275179	0.8525370	3.495472	3226
## [1639]	{la,tx}	=> {sc}	0.09275179	0.7673644	4.913421	3226
## [1640]	{sc,tx}	=> {la}	0.09275179	0.9272780	6.257597	3226
## [1641]	{va,wv}	=> {il}	0.09275179	0.8579787	5.775374	3226
## [1642]	{il,wv}	=> {va}	0.09275179	0.9513418	5.868858	3226
## [1643]	{il,va}	=> {wv}	0.09275179	0.8265437	7.077306	3226
## [1644]	{al,ky}	=> {ga}	0.09275179	0.9246202	5.412187	3226
## [1645]	{ga,ky}	=> {al}	0.09275179	0.9061798	5.527506	3226
## [1646]	{mi,va}	=> {ny}	0.09275179	0.9550030	5.753674	3226
## [1647]	{mi,ny}	=> {va}	0.09275179	0.7897185	4.871798	3226
## [1648]	{ny,va}	=> {mi}	0.09275179	0.7889460	5.796436	3226
## [1649]	{ct,ma,md,pa}	=> {ny}	0.09275179	0.9926154	5.980280	3226
## [1650]	{ct,ma,md,ny}	=> {pa}	0.09275179	0.9737398	6.187001	3226
## [1651]	{ct,ma,ny,pa}	=> {md}	0.09275179	0.8819027	6.004984	3226
## [1652]	{ct,md,ny,pa}	=> {ma}	0.09275179	0.9635603	6.752688	3226
## [1653]	{ma,md,ny,pa}	=> {ct}	0.09275179	0.9479871	7.508982	3226
## [1654]	{in,tn}	=> {oh}	0.09272304	0.9285920	6.768097	3225
## [1655]	{oh,tn}	=> {in}	0.09272304	0.9051361	7.090437	3225
## [1656]	{in,oh}	=> {tn}	0.09272304	0.8258643	5.862119	3225
## [1657]	{ct,md,va}	=> {ny}	0.09269429	0.9814307	5.912895	3224
## [1658]	{ct,md,ny}	=> {va}	0.09269429	0.9350348	5.768259	3224
## [1659]	{ct,ny,va}	=> {md}	0.09269429	0.9380273	6.387144	3224
## [1660]	{md,ny,va}	=> {ct}	0.09269429	0.8690027	6.883348	3224

## [1661]	{md,nc,oh}	=> {va}	0.09269429	0.9811321	6.052635	3224
## [1662]	{md,oh,va}	=> {nc}	0.09269429	0.9112493	5.348323	3224
## [1663]	{nc,oh,va}	=> {md}	0.09269429	0.9451774	6.435829	3224
## [1664]	{md,nc,va}	=> {oh}	0.09269429	0.8007948	5.836640	3224
## [1665]	{sc,tx}	=> {al}	0.09266554	0.9264156	5.650940	3223
## [1666]	{al,tx}	=> {sc}	0.09266554	0.8603844	5.509026	3223
## [1667]	{pa,va,wv}	=> {ny}	0.09266554	0.9224385	5.557480	3223
## [1668]	{ny,va,wv}	=> {pa}	0.09266554	0.9823225	6.241534	3223
## [1669]	{ny,pa,wv}	=> {va}	0.09266554	0.9471055	5.842724	3223
## [1670]	{ny,pa,va}	=> {wv}	0.09266554	0.8412947	7.203612	3223
## [1671]	{me,pa}	=> {ny}	0.09263678	0.9811206	5.911026	3222
## [1672]	{me,ny}	=> {pa}	0.09263678	0.8917797	5.666238	3222
## [1673]	{mi,pa,wi}	=> {ny}	0.09263678	0.9725324	5.859285	3222
## [1674]	{mi,ny,wi}	=> {pa}	0.09263678	0.9237385	5.869300	3222
## [1675]	{ny,pa,wi}	=> {mi}	0.09263678	0.9566508	7.028575	3222
## [1676]	{mi,ny,pa}	=> {wi}	0.09263678	0.8691664	6.996176	3222
## [1677]	{ga,md,nc,sc}	=> {va}	0.09263678	0.9844180	6.072906	3222
## [1678]	{ga,md,sc,va}	=> {nc}	0.09263678	0.9923006	5.824031	3222
## [1679]	{ga,nc,sc,va}	=> {md}	0.09263678	0.8423529	5.735685	3222
## [1680]	{md,nc,sc,va}	=> {ga}	0.09263678	0.9507229	5.564977	3222
## [1681]	{ga,md,nc,va}	=> {sc}	0.09263678	0.9247991	5.921472	3222
## [1682]	{oh,wi}	=> {pa}	0.09260803	0.9338939	5.933826	3221
## [1683]	{pa,wi}	=> {oh}	0.09260803	0.9155770	6.673237	3221
## [1684]	{oh,pa}	=> {wi}	0.09260803	0.7658107	6.164236	3221
## [1685]	{ma,nc}	=> {ny}	0.09257928	0.9617682	5.794433	3220
## [1686]	{nc,ny}	=> {ma}	0.09257928	0.8568387	6.004777	3220
## [1687]	{md,oh,wv}	=> {va}	0.09257928	0.9713424	5.992242	3220
## [1688]	{oh,va,wv}	=> {md}	0.09257928	0.9529447	6.488717	3220
## [1689]	{md,va,wv}	=> {oh}	0.09257928	0.9239598	6.734335	3220
## [1690]	{md,oh,va}	=> {wv}	0.09257928	0.9101187	7.792919	3220
## [1691]	{nj,tn}	=> {md}	0.09255053	0.9484384	6.458034	3219
## [1692]	{md,tn}	=> {nj}	0.09255053	0.8590873	6.196581	3219
## [1693]	{md,nj}	=> {tn}	0.09255053	0.8037453	5.705115	3219
## [1694]	{ga,la,ms,sc}	=> {nc}	0.09255053	0.9456522	5.550241	3219
## [1695]	{la,ms,nc,sc}	=> {ga}	0.09255053	0.9814024	5.744557	3219
## [1696]	{ga,la,ms,nc}	=> {sc}	0.09255053	0.9763421	6.251501	3219
## [1697]	{ga,ms,nc,sc}	=> {la}	0.09255053	0.8911960	6.014103	3219
## [1698]	{ga,la,nc,sc}	=> {ms}	0.09255053	0.9534953	6.887543	3219
## [1699]	{al,ga,la,ms}	=> {nc}	0.09255053	0.9070161	5.323477	3219
## [1700]	{al,la,ms,nc}	=> {ga}	0.09255053	0.9784195	5.727096	3219
## [1701]	{ga,la,ms,nc}	=> {al}	0.09255053	0.9763421	5.955482	3219
## [1702]	{al,ga,ms,nc}	=> {la}	0.09255053	0.8855571	5.976050	3219
## [1703]	{al,ga,la,nc}	=> {ms}	0.09255053	0.9591776	6.928589	3219
## [1704]	{al,ky}	=> {va}	0.09252178	0.9223273	5.689866	3218
## [1705]	{al,va}	=> {ky}	0.09252178	0.7951569	6.071647	3218
## [1706]	{ky,va}	=> {al}	0.09252178	0.8171661	4.984541	3218
## [1707]	{il,wi}	=> {pa}	0.09252178	0.8830955	5.611060	3218
## [1708]	{pa,wi}	=> {il}	0.09252178	0.9147243	6.157350	3218
## [1709]	{il,pa}	=> {wi}	0.09252178	0.7945679	6.395711	3218
## [1710]	{oh,tn}	=> {md}	0.09252178	0.9031715	6.149806	3218
## [1711]	{md,tn}	=> {oh}	0.09252178	0.8588204	6.259562	3218
## [1712]	{md,oh}	=> {tn}	0.09252178	0.8549416	6.068515	3218
## [1713]	{oh,tn}	=> {nc}	0.09252178	0.9031715	5.300912	3218
## [1714]	{nc,tn}	=> {oh}	0.09252178	0.7649156	5.575132	3218

## [1715] {nc,oh}	=> {tn}	0.09252178	0.9064789	6.434335	3218
## [1716] {al,ms,sc}	=> {va}	0.09252178	0.8457293	5.217331	3218
## [1717] {ms,sc,va}	=> {al}	0.09252178	0.9701538	5.917734	3218
## [1718] {al,ms,va}	=> {sc}	0.09252178	0.9489826	6.076319	3218
## [1719] {al,sc,va}	=> {ms}	0.09252178	0.8739815	6.313178	3218
## [1720] {ky,va}	=> {ny}	0.09249303	0.8169121	4.921708	3217
## [1721] {ky,ny}	=> {va}	0.09249303	0.9346310	5.765768	3217
## [1722] {ny,va}	=> {ky}	0.09249303	0.7867449	6.007415	3217
## [1723] {in,nj,oh}	=> {pa}	0.09249303	0.9804938	6.229915	3217
## [1724] {in,nj,pa}	=> {oh}	0.09249303	0.9646177	7.030672	3217
## [1725] {in,oh,pa}	=> {nj}	0.09249303	0.8951029	6.456362	3217
## [1726] {nj,oh,pa}	=> {in}	0.09249303	0.8899032	6.971109	3217
## [1727] {ct,me}	=> {ma}	0.09246428	0.9807868	6.873413	3216
## [1728] {ma,me}	=> {ct}	0.09246428	0.9268012	7.341169	3216
## [1729] {ct,ma}	=> {me}	0.09246428	0.8042011	7.047346	3216
## [1730] {ma,nj}	=> {il}	0.09246428	0.8335925	5.611222	3216
## [1731] {il,nj}	=> {ma}	0.09246428	0.8808546	6.173081	3216
## [1732] {il,ma}	=> {nj}	0.09246428	0.9043870	6.523327	3216
## [1733] {tn,wv}	=> {nc}	0.09240677	0.9378465	5.504428	3214
## [1734] {nc,wv}	=> {tn}	0.09240677	0.9222382	6.546197	3214
## [1735] {nc,tn}	=> {wv}	0.09240677	0.7639648	6.541472	3214
## [1736] {nj,tn}	=> {pa}	0.09240677	0.9469652	6.016879	3214
## [1737] {pa,tn}	=> {nj}	0.09240677	0.8757493	6.316764	3214
## [1738] {nj,pa}	=> {tn}	0.09240677	0.7564133	5.369145	3214
## [1739] {md,mi}	=> {ny}	0.09240677	0.9611244	5.790554	3214
## [1740] {mi,ny}	=> {md}	0.09240677	0.7867809	5.357288	3214
## [1741] {md,ny}	=> {mi}	0.09240677	0.7926017	5.823295	3214
## [1742] {md,nc,tn}	=> {pa}	0.09240677	0.9102237	5.783429	3214
## [1743] {md,pa,tn}	=> {nc}	0.09240677	0.9455722	5.549772	3214
## [1744] {nc,pa,tn}	=> {md}	0.09240677	0.9494830	6.465147	3214
## [1745] {md,nc,pa}	=> {tn}	0.09240677	0.8895655	6.314281	3214
## [1746] {md,nj,oh}	=> {va}	0.09240677	0.9574024	5.906246	3214
## [1747] {nj,oh,va}	=> {md}	0.09240677	0.9576877	6.521013	3214
## [1748] {md,nj,va}	=> {oh}	0.09240677	0.8538789	6.223546	3214
## [1749] {md,oh,va}	=> {nj}	0.09240677	0.9084228	6.552438	3214
## [1750] {al,ga,sc,tn}	=> {nc}	0.09240677	0.9760097	5.728416	3214
## [1751] {al,ga,nc,sc}	=> {tn}	0.09240677	0.7959386	5.649702	3214
## [1752] {al,nc,sc,tn}	=> {ga}	0.09240677	0.9816738	5.746145	3214
## [1753] {ga,nc,sc,tn}	=> {al}	0.09240677	0.9356623	5.707343	3214
## [1754] {al,ga,nc,tn}	=> {sc}	0.09240677	0.9492026	6.077727	3214
## [1755] {ky,md}	=> {il}	0.09237802	0.8856119	5.961383	3213
## [1756] {il,ky}	=> {md}	0.09237802	0.8533865	5.810813	3213
## [1757] {il,md}	=> {ky}	0.09237802	0.8597806	6.565099	3213
## [1758] {in,md}	=> {ny}	0.09234927	0.9086280	5.474275	3212
## [1759] {in,ny}	=> {md}	0.09234927	0.8735382	5.948029	3212
## [1760] {md,ny}	=> {in}	0.09234927	0.7921085	6.205028	3212
## [1761] {ct,md,nj,pa}	=> {ny}	0.09234927	0.9907465	5.969020	3212
## [1762] {ct,md,nj,ny}	=> {pa}	0.09234927	0.9771828	6.208878	3212
## [1763] {ct,nj,ny,pa}	=> {md}	0.09234927	0.9081142	6.183461	3212
## [1764] {ct,md,ny,pa}	=> {nj}	0.09234927	0.9593787	6.919982	3212
## [1765] {md,nj,ny,pa}	=> {ct}	0.09234927	0.9047887	7.166809	3212
## [1766] {ct,ma,mi,pa}	=> {ny}	0.09234927	0.9916641	5.974549	3212
## [1767] {ct,ma,mi,ny}	=> {pa}	0.09234927	0.9718608	6.175062	3212
## [1768] {ct,ma,ny,pa}	=> {mi}	0.09234927	0.8780755	6.451276	3212

## [1769]	{ct,mi,ny,pa}	=> {ma}	0.09234927	0.9712731	6.806740	3212
## [1770]	{ma,mi,ny,pa}	=> {ct}	0.09234927	0.9514218	7.536188	3212
## [1771]	{il,nj,oh,pa}	=> {ny}	0.09234927	0.9700997	5.844628	3212
## [1772]	{il,nj,ny,oh}	=> {pa}	0.09234927	0.9861836	6.266067	3212
## [1773]	{nj,ny,oh,pa}	=> {il}	0.09234927	0.9200802	6.193402	3212
## [1774]	{il,nj,ny,pa}	=> {oh}	0.09234927	0.9519858	6.938604	3212
## [1775]	{il,ny,oh,pa}	=> {nj}	0.09234927	0.9221935	6.651765	3212
## [1776]	{mn,wi}	=> {mi}	0.09232052	0.9299160	6.832152	3211
## [1777]	{mi,mn}	=> {wi}	0.09232052	0.9491576	7.640048	3211
## [1778]	{mi,wi}	=> {mn}	0.09232052	0.8414570	7.448897	3211
## [1779]	{ct,nj,va}	=> {pa}	0.09232052	0.9692122	6.158233	3211
## [1780]	{ct,nj,pa}	=> {va}	0.09232052	0.8956764	5.525456	3211
## [1781]	{ct,pa,va}	=> {nj}	0.09232052	0.9483166	6.840191	3211
## [1782]	{nj,pa,va}	=> {ct}	0.09232052	0.8638687	6.842682	3211
## [1783]	{in,md,va}	=> {pa}	0.09232052	0.9536680	6.059468	3211
## [1784]	{in,md,pa}	=> {va}	0.09232052	0.9565088	5.900733	3211
## [1785]	{in,pa,va}	=> {md}	0.09232052	0.9471976	6.449585	3211
## [1786]	{md,pa,va}	=> {in}	0.09232052	0.8250257	6.462887	3211
## [1787]	{al,ar}	=> {tn}	0.09229177	0.8867403	6.294228	3210
## [1788]	{ar,tn}	=> {al}	0.09229177	0.9004208	5.492377	3210
## [1789]	{al,tn}	=> {ar}	0.09229177	0.8273196	6.241866	3210
## [1790]	{ct,me}	=> {ny}	0.09229177	0.9789570	5.897991	3210
## [1791]	{me,ny}	=> {ct}	0.09229177	0.8884583	7.037456	3210
## [1792]	{ct,ny}	=> {me}	0.09229177	0.7768635	6.807783	3210
## [1793]	{md,nc,wv}	=> {va}	0.09229177	0.9867814	6.087486	3210
## [1794]	{md,va,wv}	=> {nc}	0.09229177	0.9210904	5.406082	3210
## [1795]	{nc,va,wv}	=> {md}	0.09229177	0.9419014	6.413522	3210
## [1796]	{md,nc,va}	=> {wv}	0.09229177	0.7973174	6.827055	3210
## [1797]	{ct,il,ma}	=> {ny}	0.09229177	0.9873885	5.948789	3210
## [1798]	{ct,ma,ny}	=> {il}	0.09229177	0.8275329	5.570432	3210
## [1799]	{ct,il,ny}	=> {ma}	0.09229177	0.9576372	6.711179	3210
## [1800]	{il,ma,ny}	=> {ct}	0.09229177	0.9375000	7.425914	3210
## [1801]	{il,in,md}	=> {pa}	0.09229177	0.9522397	6.050393	3210
## [1802]	{in,md,pa}	=> {il}	0.09229177	0.9562109	6.436611	3210
## [1803]	{il,in,pa}	=> {md}	0.09229177	0.8961474	6.101978	3210
## [1804]	{il,md,pa}	=> {in}	0.09229177	0.9195073	7.203014	3210
## [1805]	{ma,mi,nj}	=> {ny}	0.09229177	0.9919654	5.976364	3210
## [1806]	{ma,nj,ny}	=> {mi}	0.09229177	0.8537234	6.272360	3210
## [1807]	{mi,nj,ny}	=> {ma}	0.09229177	0.9424545	6.604777	3210
## [1808]	{ma,mi,ny}	=> {nj}	0.09229177	0.9067797	6.540586	3210
## [1809]	{il,ma,oh}	=> {ny}	0.09229177	0.9798535	5.903392	3210
## [1810]	{ma,ny,oh}	=> {il}	0.09229177	0.9034619	6.081538	3210
## [1811]	{il,ma,ny}	=> {oh}	0.09229177	0.9375000	6.833023	3210
## [1812]	{il,ny,oh}	=> {ma}	0.09229177	0.8857616	6.207470	3210
## [1813]	{de,nj}	=> {md}	0.09226302	0.9599162	6.536188	3209
## [1814]	{de,md}	=> {nj}	0.09226302	0.9399531	6.779865	3209
## [1815]	{md,nj}	=> {de}	0.09226302	0.8012484	7.677196	3209
## [1816]	{pa,vt}	=> {ny}	0.09226302	0.9873846	5.948766	3209
## [1817]	{ny,vt}	=> {pa}	0.09226302	0.9142450	5.808980	3209
## [1818]	{ct,oh}	=> {il}	0.09226302	0.9041984	6.086496	3209
## [1819]	{ct,il}	=> {oh}	0.09226302	0.9352958	6.816958	3209
## [1820]	{il,oh}	=> {ct}	0.09226302	0.7855569	6.222376	3209
## [1821]	{in,ma}	=> {ny}	0.09226302	0.9765673	5.883594	3209
## [1822]	{in,ny}	=> {ma}	0.09226302	0.8727223	6.116090	3209

## [1823]	{nc,oh}	=> {ny}	0.09226302	0.9039437	5.446053	3209
## [1824]	{ny,oh}	=> {nc}	0.09226302	0.7826829	4.593739	3209
## [1825]	{nc,ny}	=> {oh}	0.09226302	0.8539117	6.223785	3209
## [1826]	{al,ga,ms,nc}	=> {va}	0.09226302	0.8828061	5.446058	3209
## [1827]	{al,ga,ms,va}	=> {nc}	0.09226302	0.9792493	5.747430	3209
## [1828]	{al,ms,nc,va}	=> {ga}	0.09226302	0.9768645	5.717995	3209
## [1829]	{ga,ms,nc,va}	=> {al}	0.09226302	0.9733091	5.936980	3209
## [1830]	{al,ga,nc,va}	=> {ms}	0.09226302	0.8687060	6.275070	3209
## [1831]	{ma,nj,pa,va}	=> {ny}	0.09226302	0.9858679	5.939628	3209
## [1832]	{ma,nj,ny,va}	=> {pa}	0.09226302	0.9694864	6.159976	3209
## [1833]	{ma,nj,ny,pa}	=> {va}	0.09226302	0.8921323	5.503593	3209
## [1834]	{nj,ny,pa,va}	=> {ma}	0.09226302	0.9119068	6.390697	3209
## [1835]	{ma,ny,pa,va}	=> {nj}	0.09226302	0.9477259	6.835930	3209
## [1836]	{ar,tn}	=> {va}	0.09223427	0.8998597	5.551263	3208
## [1837]	{ar,va}	=> {tn}	0.09223427	0.9268997	6.579286	3208
## [1838]	{tn,va}	=> {ar}	0.09223427	0.7587512	5.724539	3208
## [1839]	{ky,sc}	=> {va}	0.09223427	0.9596171	5.919908	3208
## [1840]	{sc,va}	=> {ky}	0.09223427	0.7694891	5.875653	3208
## [1841]	{ky,va}	=> {sc}	0.09223427	0.8146267	5.216040	3208
## [1842]	{nc,oh}	=> {il}	0.09223427	0.9036620	6.082885	3208
## [1843]	{il,oh}	=> {nc}	0.09223427	0.7853121	4.609170	3208
## [1844]	{il,nc}	=> {oh}	0.09223427	0.8881506	6.473337	3208
## [1845]	{ga,md,tn}	=> {va}	0.09223427	0.9901235	6.108103	3208
## [1846]	{ga,tn,va}	=> {md}	0.09223427	0.8793860	5.987847	3208
## [1847]	{ga,md,va}	=> {tn}	0.09223427	0.9021372	6.403517	3208
## [1848]	{md,tn,va}	=> {ga}	0.09223427	0.8772218	5.134744	3208
## [1849]	{md,nc,va}	=> {il}	0.09223427	0.7968207	5.363696	3208
## [1850]	{il,md,nc}	=> {va}	0.09223427	0.9810398	6.052065	3208
## [1851]	{il,md,va}	=> {nc}	0.09223427	0.9152639	5.371886	3208
## [1852]	{il,nc,va}	=> {md}	0.09223427	0.9306643	6.337008	3208
## [1853]	{mt,wy}	=> {co}	0.09220551	0.8397486	5.344428	3207
## [1854]	{co,wy}	=> {mt}	0.09220551	0.8349388	6.050001	3207
## [1855]	{co,mt}	=> {wy}	0.09220551	0.9435128	6.967371	3207
## [1856]	{in,wv}	=> {oh}	0.09220551	0.9729976	7.091749	3207
## [1857]	{oh,wv}	=> {in}	0.09220551	0.9016025	7.062756	3207
## [1858]	{in,oh}	=> {wv}	0.09220551	0.8212548	7.032020	3207
## [1859]	{ma,mi,oh}	=> {ny}	0.09217676	0.9861581	5.941376	3206
## [1860]	{ma,mi,ny}	=> {oh}	0.09217676	0.9056497	6.600881	3206
## [1861]	{ma,ny,oh}	=> {mi}	0.09217676	0.9023361	6.629521	3206
## [1862]	{mi,ny,oh}	=> {ma}	0.09217676	0.9061617	6.350435	3206
## [1863]	{ct,nj,oh,pa}	=> {ny}	0.09217676	0.9901174	5.965230	3206
## [1864]	{ct,nj,ny,oh}	=> {pa}	0.09217676	0.9879815	6.277491	3206
## [1865]	{ct,nj,ny,pa}	=> {oh}	0.09217676	0.9064179	6.606479	3206
## [1866]	{ct,ny,oh,pa}	=> {nj}	0.09217676	0.9423868	6.797419	3206
## [1867]	{nj,ny,oh,pa}	=> {ct}	0.09217676	0.9183615	7.274318	3206
## [1868]	{md,nj,oh,pa}	=> {ny}	0.09217676	0.9694587	5.840766	3206
## [1869]	{md,nj,ny,oh}	=> {pa}	0.09217676	0.9907293	6.294950	3206
## [1870]	{nj,ny,oh,pa}	=> {md}	0.09217676	0.9183615	6.253236	3206
## [1871]	{md,nj,ny,pa}	=> {oh}	0.09217676	0.9030986	6.582287	3206
## [1872]	{md,ny,oh,pa}	=> {nj}	0.09217676	0.9396249	6.777497	3206
## [1873]	{md,tn}	=> {il}	0.09214801	0.8553509	5.757686	3205
## [1874]	{il,tn}	=> {md}	0.09214801	0.8673884	5.906154	3205
## [1875]	{il,md}	=> {tn}	0.09214801	0.8576398	6.087667	3205
## [1876]	{oh,pa,wv}	=> {ny}	0.09214801	0.9396072	5.660917	3205

## [1877]	{ny,oh,wv}	=> {pa}	0.09214801	0.9861538	6.265878	3205
## [1878]	{ny,pa,wv}	=> {oh}	0.09214801	0.9418160	6.864481	3205
## [1879]	{ny,oh,pa}	=> {wv}	0.09214801	0.8245433	7.060178	3205
## [1880]	{ma,nc}	=> {va}	0.09211926	0.9569892	5.903697	3204
## [1881]	{ma,va}	=> {nc}	0.09211926	0.8773275	5.149228	3204
## [1882]	{in,md,oh}	=> {il}	0.09211926	0.9618733	6.474727	3204
## [1883]	{il,in,oh}	=> {md}	0.09211926	0.8603652	5.858332	3204
## [1884]	{il,in,md}	=> {oh}	0.09211926	0.9504598	6.927482	3204
## [1885]	{il,md,oh}	=> {in}	0.09211926	0.9395894	7.360329	3204
## [1886]	{ma,md,nj}	=> {va}	0.09211926	0.9462493	5.837442	3204
## [1887]	{ma,nj,va}	=> {md}	0.09211926	0.9493333	6.464127	3204
## [1888]	{md,nj,va}	=> {ma}	0.09211926	0.8512221	5.965415	3204
## [1889]	{ma,md,va}	=> {nj}	0.09211926	0.9564179	6.898625	3204
## [1890]	{ar,sc}	=> {ga}	0.09209051	0.9544100	5.586559	3203
## [1891]	{ar,ga}	=> {sc}	0.09209051	0.8982053	5.751192	3203
## [1892]	{ky,oh}	=> {ny}	0.09209051	0.8782561	5.291291	3203
## [1893]	{ky,ny}	=> {oh}	0.09209051	0.9305636	6.782467	3203
## [1894]	{ny,oh}	=> {ky}	0.09209051	0.7812195	5.965224	3203
## [1895]	{al,ga,la}	=> {tx}	0.09209051	0.8511826	3.489919	3203
## [1896]	{al,la,tx}	=> {ga}	0.09209051	0.9249206	5.413945	3203
## [1897]	{ga,la,tx}	=> {al}	0.09209051	0.9549791	5.825172	3203
## [1898]	{al,ga,tx}	=> {la}	0.09209051	0.9501632	6.412034	3203
## [1899]	{md,pa,wv}	=> {ny}	0.09209051	0.9278679	5.590191	3203
## [1900]	{md,ny,wv}	=> {pa}	0.09209051	0.9894964	6.287117	3203
## [1901]	{ny,pa,wv}	=> {md}	0.09209051	0.9412283	6.408939	3203
## [1902]	{md,ny,pa}	=> {wv}	0.09209051	0.8373856	7.170140	3203
## [1903]	{al,ar}	=> {nc}	0.09206176	0.8845304	5.191504	3202
## [1904]	{ar,nc}	=> {al}	0.09206176	0.9201149	5.612508	3202
## [1905]	{fl,la,sc}	=> {ga}	0.09203301	0.9711772	5.684704	3201
## [1906]	{fl,ga,la}	=> {sc}	0.09203301	0.9262153	5.930540	3201
## [1907]	{fl,ga,sc}	=> {la}	0.09203301	0.8590982	5.797496	3201
## [1908]	{ga,la,sc}	=> {fl}	0.09203301	0.8901557	4.676107	3201
## [1909]	{ky,md,tn}	=> {nc}	0.09203301	0.9512630	5.583172	3201
## [1910]	{ky,nc,tn}	=> {md}	0.09203301	0.9004219	6.131084	3201
## [1911]	{ky,md,nc}	=> {tn}	0.09203301	0.9560932	6.786506	3201
## [1912]	{md,nc,tn}	=> {ky}	0.09203301	0.9065421	6.922160	3201
## [1913]	{ky,oh,va}	=> {pa}	0.09203301	0.9492883	6.031640	3201
## [1914]	{ky,oh,pa}	=> {va}	0.09203301	0.9509804	5.866628	3201
## [1915]	{ky,pa,va}	=> {oh}	0.09203301	0.9316065	6.790068	3201
## [1916]	{oh,pa,va}	=> {ky}	0.09203301	0.8719695	6.658171	3201
## [1917]	{il,md,nj}	=> {pa}	0.09203301	0.9750228	6.195153	3201
## [1918]	{md,nj,pa}	=> {il}	0.09203301	0.8581769	5.776708	3201
## [1919]	{il,nj,pa}	=> {md}	0.09203301	0.9148328	6.229209	3201
## [1920]	{il,md,pa}	=> {nj}	0.09203301	0.9169292	6.613794	3201
## [1921]	{de,nj}	=> {va}	0.09200426	0.9572241	5.905145	3200
## [1922]	{de,va}	=> {nj}	0.09200426	0.9375916	6.762831	3200
## [1923]	{nj,va}	=> {de}	0.09200426	0.7928642	7.596862	3200
## [1924]	{in,nc}	=> {il}	0.09200426	0.9520976	6.408923	3200
## [1925]	{il,in}	=> {nc}	0.09200426	0.7740687	4.543180	3200
## [1926]	{il,nc}	=> {in}	0.09200426	0.8859358	6.940030	3200
## [1927]	{il,oh,va}	=> {ny}	0.09200426	0.9137636	5.505216	3200
## [1928]	{ny,oh,va}	=> {il}	0.09200426	0.9140246	6.152640	3200
## [1929]	{il,ny,oh}	=> {va}	0.09200426	0.8830022	5.447268	3200
## [1930]	{il,ny,va}	=> {oh}	0.09200426	0.9487103	6.914731	3200

## [1931]	{ar,ky}	=> {tn}	0.09197550	0.9501040	6.743993	3199
## [1932]	{ar,tn}	=> {ky}	0.09197550	0.8973352	6.851859	3199
## [1933]	{ky,tn}	=> {ar}	0.09197550	0.8025590	6.055055	3199
## [1934]	{md,tn}	=> {ny}	0.09197550	0.8537497	5.143646	3199
## [1935]	{ny,tn}	=> {md}	0.09197550	0.9259045	6.304597	3199
## [1936]	{md,ny}	=> {tn}	0.09197550	0.7889026	5.599759	3199
## [1937]	{ct,ma,pa,va}	=> {ny}	0.09197550	0.9891775	5.959567	3199
## [1938]	{ct,ma,ny,va}	=> {pa}	0.09197550	0.9726361	6.179988	3199
## [1939]	{ct,ma,ny,pa}	=> {va}	0.09197550	0.8745216	5.394951	3199
## [1940]	{ct,ny,pa,va}	=> {ma}	0.09197550	0.9626843	6.746549	3199
## [1941]	{ma,ny,pa,va}	=> {ct}	0.09197550	0.9447726	7.483520	3199
## [1942]	{ct,ma,nj}	=> {md}	0.09191800	0.8975295	6.111389	3197
## [1943]	{ct,md,nj}	=> {ma}	0.09191800	0.9609258	6.734225	3197
## [1944]	{ct,ma,md}	=> {nj}	0.09191800	0.9563267	6.897967	3197
## [1945]	{ma,md,nj}	=> {ct}	0.09191800	0.9441819	7.478841	3197
## [1946]	{ky,sc}	=> {tn}	0.09188925	0.9560275	6.786039	3196
## [1947]	{sc,tn}	=> {ky}	0.09188925	0.8649526	6.604592	3196
## [1948]	{ky,tn}	=> {sc}	0.09188925	0.8018063	5.133952	3196
## [1949]	{ct,mi}	=> {oh}	0.09188925	0.9136650	6.659300	3196
## [1950]	{ct,oh}	=> {mi}	0.09188925	0.9005354	6.616291	3196
## [1951]	{mi,oh}	=> {ct}	0.09188925	0.8504524	6.736412	3196
## [1952]	{tn,wv}	=> {md}	0.09186050	0.9323023	6.348161	3195
## [1953]	{md,wv}	=> {tn}	0.09186050	0.8840620	6.275216	3195
## [1954]	{md,tn}	=> {wv}	0.09186050	0.8526821	7.301117	3195
## [1955]	{ky,nc}	=> {il}	0.09186050	0.8479299	5.707732	3195
## [1956]	{il,ky}	=> {nc}	0.09186050	0.8486056	4.980653	3195
## [1957]	{il,nc}	=> {ky}	0.09186050	0.8845515	6.754245	3195
## [1958]	{il,tn}	=> {pa}	0.09186050	0.8646820	5.494064	3195
## [1959]	{pa,tn}	=> {il}	0.09186050	0.8705722	5.860146	3195
## [1960]	{il,pa}	=> {tn}	0.09186050	0.7888889	5.599662	3195
## [1961]	{al,sc,tn}	=> {va}	0.09183175	0.9474933	5.845116	3194
## [1962]	{al,sc,va}	=> {tn}	0.09183175	0.8674633	6.157396	3194
## [1963]	{sc,tn,va}	=> {al}	0.09183175	0.9178161	5.598485	3194
## [1964]	{al,tn,va}	=> {sc}	0.09183175	0.9120503	5.839842	3194
## [1965]	{ky,tn,va}	=> {pa}	0.09183175	0.8757883	5.564632	3194
## [1966]	{ky,pa,tn}	=> {va}	0.09183175	0.9705257	5.987204	3194
## [1967]	{ky,pa,va}	=> {tn}	0.09183175	0.9295693	6.598234	3194
## [1968]	{pa,tn,va}	=> {ky}	0.09183175	0.9084187	6.936489	3194
## [1969]	{il,nj,va}	=> {pa}	0.09183175	0.9684657	6.153490	3194
## [1970]	{nj,pa,va}	=> {il}	0.09183175	0.8592951	5.784235	3194
## [1971]	{il,nj,pa}	=> {va}	0.09183175	0.9128322	5.631291	3194
## [1972]	{il,pa,va}	=> {nj}	0.09183175	0.9035361	6.517190	3194
## [1973]	{mi,oh,on}	=> {pa}	0.09183175	0.9542874	6.063404	3194
## [1974]	{mi,oh,pa}	=> {on}	0.09183175	0.9073864	6.227270	3194
## [1975]	{mi,on,pa}	=> {oh}	0.09183175	0.9295693	6.775220	3194
## [1976]	{oh,on,pa}	=> {mi}	0.09183175	0.9463704	6.953043	3194
## [1977]	{il,on,pa}	=> {ny}	0.09183175	0.9761614	5.881148	3194
## [1978]	{il,ny,on}	=> {pa}	0.09183175	0.9525798	6.052553	3194
## [1979]	{ny,on,pa}	=> {il}	0.09183175	0.8803749	5.926131	3194
## [1980]	{il,ny,pa}	=> {on}	0.09183175	0.8599892	5.901990	3194
## [1981]	{ga,ms}	=> {tn}	0.09180300	0.7568144	5.371992	3193
## [1982]	{ms,tn}	=> {ga}	0.09180300	0.9349927	5.472901	3193
## [1983]	{ga,tn}	=> {ms}	0.09180300	0.8024629	5.796566	3193
## [1984]	{in,md,oh}	=> {va}	0.09180300	0.9585710	5.913455	3193

## [1985]	{in,oh,va}	=> {md}	0.09180300	0.9341720	6.360892	3193
## [1986]	{in,md,va}	=> {oh}	0.09180300	0.9483219	6.911900	3193
## [1987]	{md,oh,va}	=> {in}	0.09180300	0.9024873	7.069687	3193
## [1988]	{il,ma,oh}	=> {pa}	0.09180300	0.9746642	6.192875	3193
## [1989]	{ma,oh,pa}	=> {il}	0.09180300	0.9058156	6.097382	3193
## [1990]	{il,ma,pa}	=> {oh}	0.09180300	0.9457938	6.893473	3193
## [1991]	{il,oh,pa}	=> {ma}	0.09180300	0.8578721	6.012019	3193
## [1992]	{nj,wv}	=> {va}	0.09177424	0.9556886	5.895673	3192
## [1993]	{va,wv}	=> {nj}	0.09177424	0.8489362	6.123361	3192
## [1994]	{nj,va}	=> {wv}	0.09177424	0.7908821	6.771952	3192
## [1995]	{nj,oh,pa,va}	=> {ny}	0.09177424	0.9669797	5.825831	3192
## [1996]	{nj,ny,oh,va}	=> {pa}	0.09177424	0.9891540	6.284941	3192
## [1997]	{nj,ny,oh,pa}	=> {va}	0.09177424	0.9143512	5.640661	3192
## [1998]	{nj,ny,pa,va}	=> {oh}	0.09177424	0.9070759	6.611275	3192
## [1999]	{ny,oh,pa,va}	=> {nj}	0.09177424	0.9316988	6.720327	3192
## [2000]	{de,nc}	=> {va}	0.09174549	0.9791347	6.040313	3191
## [2001]	{de,va}	=> {nc}	0.09174549	0.9349546	5.487455	3191
## [2002]	{mo,tn}	=> {va}	0.09174549	0.9042222	5.578175	3191
## [2003]	{mo,va}	=> {tn}	0.09174549	0.9088579	6.451222	3191
## [2004]	{tn,va}	=> {mo}	0.09174549	0.7547304	5.659827	3191
## [2005]	{ct,md,va}	=> {pa}	0.09174549	0.9713851	6.172040	3191
## [2006]	{ct,md,pa}	=> {va}	0.09174549	0.9388055	5.791521	3191
## [2007]	{ct,pa,va}	=> {md}	0.09174549	0.9424099	6.416985	3191
## [2008]	{md,pa,va}	=> {ct}	0.09174549	0.8198869	6.494304	3191
## [2009]	{il,in,nj}	=> {pa}	0.09174549	0.9707940	6.168284	3191
## [2010]	{in,nj,pa}	=> {il}	0.09174549	0.9568216	6.440722	3191
## [2011]	{il,in,pa}	=> {nj}	0.09174549	0.8908431	6.425635	3191
## [2012]	{il,nj,pa}	=> {in}	0.09174549	0.9119748	7.144008	3191
## [2013]	{ga,ms,nc,sc}	=> {va}	0.09174549	0.8834441	5.449994	3191
## [2014]	{ga,ms,sc,va}	=> {nc}	0.09174549	0.9863988	5.789392	3191
## [2015]	{ms,nc,sc,va}	=> {ga}	0.09174549	0.9797360	5.734802	3191
## [2016]	{ga,ms,nc,va}	=> {sc}	0.09174549	0.9678496	6.197124	3191
## [2017]	{ga,nc,sc,va}	=> {ms}	0.09174549	0.8342484	6.026167	3191
## [2018]	{ct,mi}	=> {on}	0.09171674	0.9119497	6.258588	3190
## [2019]	{ct,on}	=> {mi}	0.09171674	0.9193084	6.754217	3190
## [2020]	{mi,on}	=> {ct}	0.09171674	0.7961068	6.305942	3190
## [2021]	{il,mi,on}	=> {ny}	0.09171674	0.9542327	5.749033	3190
## [2022]	{mi,ny,on}	=> {il}	0.09171674	0.8708709	5.862156	3190
## [2023]	{il,mi,ny}	=> {on}	0.09171674	0.9182499	6.301825	3190
## [2024]	{il,ny,on}	=> {mi}	0.09171674	0.9513868	6.989900	3190
## [2025]	{al,fl,la,ms}	=> {ga}	0.09171674	0.9654964	5.651452	3190
## [2026]	{fl,ga,la,ms}	=> {al}	0.09171674	0.9788279	5.970644	3190
## [2027]	{al,fl,ga,ms}	=> {la}	0.09171674	0.9241020	6.236164	3190
## [2028]	{al,fl,ga,la}	=> {ms}	0.09171674	0.9602649	6.936443	3190
## [2029]	{al,ga,la,ms}	=> {fl}	0.09171674	0.8988447	4.721752	3190
## [2030]	{md,nc,tn,va}	=> {pa}	0.09171674	0.9143021	5.809343	3190
## [2031]	{md,nc,pa,tn}	=> {va}	0.09171674	0.9925327	6.122965	3190
## [2032]	{md,pa,tn,va}	=> {nc}	0.09171674	0.9550898	5.605633	3190
## [2033]	{nc,pa,tn,va}	=> {md}	0.09171674	0.9617124	6.548418	3190
## [2034]	{md,nc,pa,va}	=> {tn}	0.09171674	0.9031710	6.410855	3190
## [2035]	{md,nc,nj,va}	=> {ny}	0.09171674	0.9219653	5.554629	3190
## [2036]	{md,nc,nj,ny}	=> {va}	0.09171674	0.9821429	6.058870	3190
## [2037]	{md,nj,ny,va}	=> {nc}	0.09171674	0.9177215	5.386310	3190
## [2038]	{nc,nj,ny,va}	=> {md}	0.09171674	0.9710807	6.612208	3190

## [2039]	{md,nc,ny,va}	=> {nj}	0.09171674	0.9471496	6.831773	3190
## [2040]	{nv,or}	=> {ca}	0.09168799	0.9111429	2.714154	3189
## [2041]	{nj,wv}	=> {md}	0.09168799	0.9547904	6.501285	3189
## [2042]	{md,wv}	=> {nj}	0.09168799	0.8824018	6.364748	3189
## [2043]	{md,nj}	=> {wv}	0.09168799	0.7962547	6.817955	3189
## [2044]	{ma,oh}	=> {va}	0.09168799	0.8727422	5.383974	3189
## [2045]	{ma,va}	=> {oh}	0.09168799	0.8732202	6.364516	3189
## [2046]	{oh,va}	=> {ma}	0.09168799	0.8212722	5.755525	3189
## [2047]	{fl,la,sc}	=> {al}	0.09168799	0.9675364	5.901768	3189
## [2048]	{al,fl,la}	=> {sc}	0.09168799	0.9134918	5.849072	3189
## [2049]	{al,fl,sc}	=> {la}	0.09168799	0.8765805	5.915473	3189
## [2050]	{al,la,sc}	=> {fl}	0.09168799	0.8955350	4.704365	3189
## [2051]	{oh,tn,va}	=> {pa}	0.09168799	0.9479786	6.023318	3189
## [2052]	{oh,pa,tn}	=> {va}	0.09168799	0.9657783	5.957917	3189
## [2053]	{pa,tn,va}	=> {oh}	0.09168799	0.9069966	6.610697	3189
## [2054]	{oh,pa,va}	=> {tn}	0.09168799	0.8687006	6.166179	3189
## [2055]	{al,la,ms,sc}	=> {nc}	0.09168799	0.9409855	5.522852	3189
## [2056]	{la,ms,nc,sc}	=> {al}	0.09168799	0.9722561	5.930558	3189
## [2057]	{al,la,ms,nc}	=> {sc}	0.09168799	0.9693009	6.206417	3189
## [2058]	{al,ms,nc,sc}	=> {la}	0.09168799	0.8927772	6.024773	3189
## [2059]	{al,la,nc,sc}	=> {ms}	0.09168799	0.9579453	6.919688	3189
## [2060]	{ky,mo}	=> {va}	0.09165924	0.8972699	5.535286	3188
## [2061]	{ky,va}	=> {mo}	0.09165924	0.8095480	6.070912	3188
## [2062]	{mo,va}	=> {ky}	0.09165924	0.9080034	6.933319	3188
## [2063]	{nj,tn}	=> {nc}	0.09165924	0.9393047	5.512986	3188
## [2064]	{nc,tn}	=> {nj}	0.09165924	0.7577846	5.465887	3188
## [2065]	{nc,nj}	=> {tn}	0.09165924	0.8471964	6.013538	3188
## [2066]	{al,ga,md}	=> {va}	0.09165924	0.9785144	6.036486	3188
## [2067]	{al,ga,va}	=> {md}	0.09165924	0.8416051	5.730592	3188
## [2068]	{al,md,va}	=> {ga}	0.09165924	0.9476813	5.547173	3188
## [2069]	{ga,md,va}	=> {al}	0.09165924	0.8965129	5.468540	3188
## [2070]	{in,mi,oh}	=> {pa}	0.09165924	0.9490920	6.030393	3188
## [2071]	{in,mi,pa}	=> {oh}	0.09165924	0.9707674	7.075494	3188
## [2072]	{in,oh,pa}	=> {mi}	0.09165924	0.8870339	6.517095	3188
## [2073]	{mi,oh,pa}	=> {in}	0.09165924	0.9056818	7.094712	3188
## [2074]	{ut,wy}	=> {co}	0.09163049	0.9118741	5.803457	3187
## [2075]	{co,wy}	=> {ut}	0.09163049	0.8297318	4.777173	3187
## [2076]	{co,ut}	=> {wy}	0.09163049	0.7957553	5.876256	3187
## [2077]	{tn,wv}	=> {pa}	0.09163049	0.9299679	5.908881	3187
## [2078]	{pa,wv}	=> {tn}	0.09163049	0.8597248	6.102467	3187
## [2079]	{pa,tn}	=> {wv}	0.09163049	0.8683924	7.435636	3187
## [2080]	{nj,wv}	=> {ny}	0.09160174	0.9538922	5.746982	3186
## [2081]	{ny,wv}	=> {nj}	0.09160174	0.9147287	6.597922	3186
## [2082]	{on,wi}	=> {il}	0.09160174	0.8688301	5.848419	3186
## [2083]	{il,wi}	=> {on}	0.09160174	0.8743139	6.000299	3186
## [2084]	{il,on}	=> {wi}	0.09160174	0.8896956	7.161422	3186
## [2085]	{nc,tn}	=> {ny}	0.09160174	0.7573092	4.562614	3186
## [2086]	{ny,tn}	=> {nc}	0.09160174	0.9221418	5.412254	3186
## [2087]	{nc,ny}	=> {tn}	0.09160174	0.8477914	6.017762	3186
## [2088]	{ma,mi}	=> {il}	0.09160174	0.8762376	5.898282	3186
## [2089]	{il,ma}	=> {mi}	0.09160174	0.8959505	6.582606	3186
## [2090]	{il,mi}	=> {ma}	0.09160174	0.8408551	5.892763	3186
## [2091]	{al,ga,md}	=> {nc}	0.09160174	0.9779006	5.739514	3186
## [2092]	{al,ga,nc}	=> {md}	0.09160174	0.7503533	5.109248	3186

## [2093]	{al,md,nc}	=> {ga}	0.09160174	0.9581955	5.608717	3186
## [2094]	{ga,md,nc}	=> {al}	0.09160174	0.8972121	5.472805	3186
## [2095]	{ct,nj}	=> {mi}	0.09157299	0.8500133	6.245102	3185
## [2096]	{ct,mi}	=> {nj}	0.09157299	0.9105203	6.567567	3185
## [2097]	{mi,nj}	=> {ct}	0.09157299	0.9160196	7.255768	3185
## [2098]	{nc,va,wv}	=> {pa}	0.09157299	0.9345657	5.938095	3185
## [2099]	{nc,pa,wv}	=> {va}	0.09157299	0.9821153	6.058700	3185
## [2100]	{pa,va,wv}	=> {nc}	0.09157299	0.9115627	5.350162	3185
## [2101]	{nc,pa,va}	=> {wv}	0.09157299	0.8491069	7.270504	3185
## [2102]	{on,wi}	=> {pa}	0.09154423	0.8682847	5.516955	3184
## [2103]	{pa,wi}	=> {on}	0.09154423	0.9050597	6.211303	3184
## [2104]	{on,pa}	=> {wi}	0.09154423	0.8470338	6.818024	3184
## [2105]	{ma,nc}	=> {pa}	0.09154423	0.9510155	6.042614	3184
## [2106]	{ma,pa}	=> {nc}	0.09154423	0.7700121	4.519371	3184
## [2107]	{nc,pa}	=> {ma}	0.09154423	0.8062801	5.650459	3184
## [2108]	{mi,oh}	=> {va}	0.09154423	0.8472592	5.226769	3184
## [2109]	{mi,va}	=> {oh}	0.09154423	0.9425696	6.869973	3184
## [2110]	{oh,va}	=> {mi}	0.09154423	0.8199845	6.024479	3184
## [2111]	{md,nc,oh}	=> {pa}	0.09154423	0.9689592	6.156626	3184
## [2112]	{md,oh,pa}	=> {nc}	0.09154423	0.8790723	5.159469	3184
## [2113]	{nc,oh,pa}	=> {md}	0.09154423	0.9470553	6.448616	3184
## [2114]	{md,nc,pa}	=> {oh}	0.09154423	0.8812621	6.423130	3184
## [2115]	{il,mi,oh,pa}	=> {ny}	0.09154423	0.9701402	5.844872	3184
## [2116]	{il,mi,ny,oh}	=> {pa}	0.09154423	0.9698447	6.162252	3184
## [2117]	{mi,ny,oh,pa}	=> {il}	0.09154423	0.9337243	6.285246	3184
## [2118]	{il,mi,ny,pa}	=> {oh}	0.09154423	0.9610625	7.004760	3184
## [2119]	{il,ny,oh,pa}	=> {mi}	0.09154423	0.9141545	6.716351	3184
## [2120]	{ky,wv}	=> {tn}	0.09151548	0.9350764	6.637325	3183
## [2121]	{tn,wv}	=> {ky}	0.09151548	0.9288007	7.092122	3183
## [2122]	{ky,tn}	=> {wv}	0.09151548	0.7985449	6.837565	3183
## [2123]	{al,ky}	=> {nc}	0.09151548	0.9122958	5.354465	3183
## [2124]	{ky,nc}	=> {al}	0.09151548	0.8447452	5.152768	3183
## [2125]	{ct,nj}	=> {il}	0.09148673	0.8492127	5.716367	3182
## [2126]	{ct,il}	=> {nj}	0.09148673	0.9274264	6.689510	3182
## [2127]	{il,nj}	=> {ct}	0.09148673	0.8715420	6.903462	3182
## [2128]	{in,ky,oh}	=> {il}	0.09148673	0.9630751	6.482817	3182
## [2129]	{il,in,ky}	=> {oh}	0.09148673	0.9342337	6.809217	3182
## [2130]	{il,ky,oh}	=> {in}	0.09148673	0.9521245	7.458523	3182
## [2131]	{il,in,oh}	=> {ky}	0.09148673	0.8544576	6.524454	3182
## [2132]	{ct,ma,on}	=> {pa}	0.09148673	0.9558426	6.073285	3182
## [2133]	{ct,ma,pa}	=> {on}	0.09148673	0.8569890	5.881400	3182
## [2134]	{ct,on,pa}	=> {ma}	0.09148673	0.9713065	6.806974	3182
## [2135]	{ma,on,pa}	=> {ct}	0.09148673	0.9422564	7.463589	3182
## [2136]	{nc,tn,va}	=> {il}	0.09145798	0.8024723	5.401739	3181
## [2137]	{il,nc,tn}	=> {va}	0.09145798	0.9742726	6.010318	3181
## [2138]	{il,tn,va}	=> {nc}	0.09145798	0.9366902	5.497641	3181
## [2139]	{il,nc,va}	=> {tn}	0.09145798	0.9228314	6.550408	3181
## [2140]	{in,mi,oh}	=> {ny}	0.09145798	0.9470080	5.705506	3181
## [2141]	{in,mi,ny}	=> {oh}	0.09145798	0.9633555	7.021473	3181
## [2142]	{in,ny,oh}	=> {mi}	0.09145798	0.9146061	6.719669	3181
## [2143]	{mi,ny,oh}	=> {in}	0.09145798	0.8990955	7.043118	3181
## [2144]	{in,mi,pa}	=> {ny}	0.09145798	0.9686358	5.835808	3181
## [2145]	{in,mi,ny}	=> {pa}	0.09145798	0.9633555	6.121021	3181
## [2146]	{in,ny,pa}	=> {mi}	0.09145798	0.9075606	6.667906	3181

## [2147]	{mi,ny,pa}	=> {in}	0.09145798	0.8581063	6.722026	3181
## [2148]	{ky,wv}	=> {pa}	0.09142923	0.9341951	5.935740	3180
## [2149]	{pa,wv}	=> {ky}	0.09142923	0.8578365	6.550255	3180
## [2150]	{ky,pa}	=> {wv}	0.09142923	0.8700410	7.449753	3180
## [2151]	{ky,nj}	=> {pa}	0.09142923	0.9589867	6.093262	3180
## [2152]	{ky,pa}	=> {nj}	0.09142923	0.8700410	6.275591	3180
## [2153]	{ma,nj}	=> {on}	0.09142923	0.8242613	5.656794	3180
## [2154]	{nj,on}	=> {ma}	0.09142923	0.9391613	6.581698	3180
## [2155]	{ma,on}	=> {nj}	0.09142923	0.8705174	6.279026	3180
## [2156]	{ma,oh}	=> {md}	0.09142923	0.8702791	5.925838	3180
## [2157]	{ma,md}	=> {oh}	0.09142923	0.8731466	6.363980	3180
## [2158]	{md,oh}	=> {ma}	0.09142923	0.8448459	5.920731	3180
## [2159]	{il,md,oh}	=> {ny}	0.09142923	0.9325513	5.618408	3180
## [2160]	{md,ny,oh}	=> {il}	0.09142923	0.9169550	6.172365	3180
## [2161]	{il,ny,oh}	=> {md}	0.09142923	0.8774834	5.974893	3180
## [2162]	{il,md,ny}	=> {oh}	0.09142923	0.9489705	6.916626	3180
## [2163]	{ky,md,nc,tn}	=> {va}	0.09142923	0.9934396	6.128560	3180
## [2164]	{ky,md,tn,va}	=> {nc}	0.09142923	0.9601449	5.635302	3180
## [2165]	{ky,nc,tn,va}	=> {md}	0.09142923	0.9220064	6.278055	3180
## [2166]	{ky,md,nc,va}	=> {tn}	0.09142923	0.9636364	6.840048	3180
## [2167]	{md,nc,tn,va}	=> {ky}	0.09142923	0.9114359	6.959529	3180
## [2168]	{ct,ma,md,nj}	=> {ny}	0.09142923	0.9946825	5.992734	3180
## [2169]	{ct,ma,nj,ny}	=> {md}	0.09142923	0.9023837	6.144441	3180
## [2170]	{ct,md,nj,ny}	=> {ma}	0.09142923	0.9674475	6.779930	3180
## [2171]	{ct,ma,md,ny}	=> {nj}	0.09142923	0.9598551	6.923418	3180
## [2172]	{ma,md,nj,ny}	=> {ct}	0.09142923	0.9535232	7.552833	3180
## [2173]	{ma,md,pa,va}	=> {ny}	0.09142923	0.9845201	5.931508	3180
## [2174]	{ma,md,ny,va}	=> {pa}	0.09142923	0.9712889	6.171429	3180
## [2175]	{ma,md,ny,pa}	=> {va}	0.09142923	0.9344696	5.764772	3180
## [2176]	{ma,ny,pa,va}	=> {md}	0.09142923	0.9391613	6.394864	3180
## [2177]	{md,ny,pa,va}	=> {ma}	0.09142923	0.8945148	6.268813	3180
## [2178]	{al,la}	=> {va}	0.09140048	0.7770716	4.793779	3179
## [2179]	{la,va}	=> {al}	0.09140048	0.9330790	5.691585	3179
## [2180]	{al,va}	=> {la}	0.09140048	0.7855201	5.300965	3179
## [2181]	{in,mo}	=> {oh}	0.09140048	0.9111493	6.640965	3179
## [2182]	{mo,oh}	=> {in}	0.09140048	0.9289889	7.277289	3179
## [2183]	{in,oh}	=> {mo}	0.09140048	0.8140845	6.104932	3179
## [2184]	{il,in,mi}	=> {ny}	0.09140048	0.9306206	5.606776	3179
## [2185]	{in,mi,ny}	=> {il}	0.09140048	0.9627498	6.480628	3179
## [2186]	{il,in,ny}	=> {mi}	0.09140048	0.9111493	6.694272	3179
## [2187]	{il,mi,ny}	=> {in}	0.09140048	0.9150835	7.168360	3179
## [2188]	{mi,nj,oh}	=> {ny}	0.09140048	0.9842105	5.929643	3179
## [2189]	{mi,nj,ny}	=> {oh}	0.09140048	0.9333529	6.802797	3179
## [2190]	{nj,ny,oh}	=> {mi}	0.09140048	0.8939820	6.568143	3179
## [2191]	{mi,ny,oh}	=> {nj}	0.09140048	0.8985302	6.481083	3179
## [2192]	{ky,nj}	=> {va}	0.09137173	0.9583836	5.912299	3178
## [2193]	{ky,va}	=> {nj}	0.09137173	0.8070086	5.820939	3178
## [2194]	{nj,va}	=> {ky}	0.09137173	0.7874133	6.012518	3178
## [2195]	{fl,ga,ms}	=> {nc}	0.09137173	0.8982476	5.272013	3178
## [2196]	{fl,ms,nc}	=> {ga}	0.09137173	0.9796547	5.734327	3178
## [2197]	{fl,ga,nc}	=> {ms}	0.09137173	0.9048975	6.536498	3178
## [2198]	{ga,ms,nc}	=> {fl}	0.09137173	0.8474667	4.451856	3178
## [2199]	{ga,md,tn}	=> {nc}	0.09137173	0.9808642	5.756908	3178
## [2200]	{ga,nc,tn}	=> {md}	0.09137173	0.8533835	5.810793	3178

## [2201]	{ga,md,nc}	=> {tn}	0.09137173	0.8949592	6.352566	3178
## [2202]	{md,nc,tn}	=> {ga}	0.09137173	0.9000283	5.268240	3178
## [2203]	{mi,qc}	=> {on}	0.09134297	0.9848109	6.758624	3177
## [2204]	{on,qc}	=> {mi}	0.09134297	0.8325472	6.116777	3177
## [2205]	{mi,on}	=> {qc}	0.09134297	0.7928625	6.455185	3177
## [2206]	{nc,tn,wv}	=> {va}	0.09134297	0.9884879	6.098013	3177
## [2207]	{tn,va,wv}	=> {nc}	0.09134297	0.9514825	5.584460	3177
## [2208]	{nc,va,wv}	=> {tn}	0.09134297	0.9322183	6.617038	3177
## [2209]	{nc,tn,va}	=> {wv}	0.09134297	0.8014632	6.862553	3177
## [2210]	{ct,ma,nj}	=> {va}	0.09134297	0.8919147	5.502250	3177
## [2211]	{ct,nj,va}	=> {ma}	0.09134297	0.9589496	6.720376	3177
## [2212]	{ct,ma,va}	=> {nj}	0.09134297	0.9529094	6.873319	3177
## [2213]	{ma,nj,va}	=> {ct}	0.09134297	0.9413333	7.456278	3177
## [2214]	{ar,ms}	=> {ga}	0.09131422	0.9155376	5.359023	3176
## [2215]	{ga,ms}	=> {ar}	0.09131422	0.7527850	5.679526	3176
## [2216]	{ar,ga}	=> {ms}	0.09131422	0.8906338	6.433465	3176
## [2217]	{ar,ga}	=> {tn}	0.09131422	0.8906338	6.321864	3176
## [2218]	{ar,tn}	=> {ga}	0.09131422	0.8908836	5.214713	3176
## [2219]	{ga,tn}	=> {ar}	0.09131422	0.7981905	6.022096	3176
## [2220]	{ky,nc,va}	=> {pa}	0.09131422	0.8788046	5.583797	3176
## [2221]	{ky,nc,pa}	=> {va}	0.09131422	0.9784350	6.035996	3176
## [2222]	{ky,pa,va}	=> {nc}	0.09131422	0.9243306	5.425100	3176
## [2223]	{nc,pa,va}	=> {ky}	0.09131422	0.8467075	6.465277	3176
## [2224]	{on,vt}	=> {ny}	0.09128547	0.9748235	5.873088	3175
## [2225]	{ny,vt}	=> {on}	0.09128547	0.9045584	6.207862	3175
## [2226]	{ny,on}	=> {vt}	0.09128547	0.7755252	7.264622	3175
## [2227]	{ky,wv}	=> {oh}	0.09128547	0.9327262	6.798229	3175
## [2228]	{oh,wv}	=> {ky}	0.09128547	0.8926061	6.815748	3175
## [2229]	{ky,oh}	=> {wv}	0.09128547	0.8705786	7.454356	3175
## [2230]	{pa,sc}	=> {nc}	0.09128547	0.9665145	5.672686	3175
## [2231]	{nc,pa}	=> {sc}	0.09128547	0.8040010	5.148004	3175
## [2232]	{in,ky}	=> {pa}	0.09128547	0.8916035	5.665119	3175
## [2233]	{ky,pa}	=> {in}	0.09128547	0.8686731	6.804801	3175
## [2234]	{in,pa}	=> {ky}	0.09128547	0.8397249	6.411959	3175
## [2235]	{ar,mo}	=> {tn}	0.09125672	0.8662664	6.148900	3174
## [2236]	{ar,tn}	=> {mo}	0.09125672	0.8903226	6.676652	3174
## [2237]	{mo,tn}	=> {ar}	0.09125672	0.8994049	6.785727	3174
## [2238]	{ky,oh}	=> {nc}	0.09125672	0.8703044	5.108008	3174
## [2239]	{ky,nc}	=> {oh}	0.09125672	0.8423567	6.139566	3174
## [2240]	{nc,oh}	=> {ky}	0.09125672	0.8940845	6.827037	3174
## [2241]	{pa,tn,va}	=> {ny}	0.09125672	0.9027304	5.438743	3174
## [2242]	{ny,tn,va}	=> {pa}	0.09125672	0.9626934	6.116814	3174
## [2243]	{ny,pa,tn}	=> {va}	0.09125672	0.9653285	5.955142	3174
## [2244]	{ny,pa,va}	=> {tn}	0.09125672	0.8285043	5.880859	3174
## [2245]	{md,nj,oh,va}	=> {pa}	0.09125672	0.9875544	6.274777	3174
## [2246]	{md,nj,oh,pa}	=> {va}	0.09125672	0.9597823	5.920927	3174
## [2247]	{nj,oh,pa,va}	=> {md}	0.09125672	0.9615268	6.547154	3174
## [2248]	{md,nj,pa,va}	=> {oh}	0.09125672	0.8996599	6.557223	3174
## [2249]	{md,oh,pa,va}	=> {nj}	0.09125672	0.9253644	6.674637	3174
## [2250]	{ar,sc}	=> {nc}	0.09122797	0.9454708	5.549176	3173
## [2251]	{ar,nc}	=> {sc}	0.09122797	0.9117816	5.838122	3173
## [2252]	{ct,wi}	=> {ny}	0.09122797	0.9820489	5.916619	3173
## [2253]	{ny,wi}	=> {ct}	0.09122797	0.8554867	6.776288	3173
## [2254]	{ct,ny}	=> {wi}	0.09122797	0.7679090	6.181125	3173

## [2255]	{ma,mi,oh}	=> {pa}	0.09122797	0.9760074	6.201409	3173
## [2256]	{ma,mi,pa}	=> {oh}	0.09122797	0.9258827	6.748350	3173
## [2257]	{ma,oh,pa}	=> {mi}	0.09122797	0.9001418	6.613400	3173
## [2258]	{mi,oh,pa}	=> {ma}	0.09122797	0.9014205	6.317208	3173
## [2259]	{ct,nj,pa,va}	=> {ny}	0.09122797	0.9881657	5.953471	3173
## [2260]	{ct,nj,ny,va}	=> {pa}	0.09122797	0.9727161	6.180497	3173
## [2261]	{ct,nj,ny,pa}	=> {va}	0.09122797	0.8970879	5.534164	3173
## [2262]	{ct,ny,pa,va}	=> {nj}	0.09122797	0.9548601	6.887389	3173
## [2263]	{nj,ny,pa,va}	=> {ct}	0.09122797	0.9016766	7.142158	3173
## [2264]	{mi,nj,oh}	=> {pa}	0.09119922	0.9820433	6.239761	3172
## [2265]	{mi,nj,pa}	=> {oh}	0.09119922	0.9404091	6.854227	3172
## [2266]	{nj,oh,pa}	=> {mi}	0.09119922	0.8774550	6.446718	3172
## [2267]	{mi,oh,pa}	=> {nj}	0.09119922	0.9011364	6.499881	3172
## [2268]	{ky,wv}	=> {md}	0.09117047	0.9315511	6.343046	3171
## [2269]	{md,wv}	=> {ky}	0.09117047	0.8774211	6.699799	3171
## [2270]	{ky,md}	=> {wv}	0.09117047	0.8740353	7.483954	3171
## [2271]	{al,fl,ms}	=> {nc}	0.09117047	0.8810781	5.171241	3171
## [2272]	{fl,ms,nc}	=> {al}	0.09117047	0.9774969	5.962525	3171
## [2273]	{al,fl,nc}	=> {ms}	0.09117047	0.9207317	6.650876	3171
## [2274]	{al,ms,nc}	=> {fl}	0.09117047	0.8494508	4.462279	3171
## [2275]	{ky,tn,va}	=> {il}	0.09117047	0.8694818	5.852805	3171
## [2276]	{il,ky,tn}	=> {va}	0.09117047	0.9345712	5.765399	3171
## [2277]	{il,ky,va}	=> {tn}	0.09117047	0.9370567	6.651382	3171
## [2278]	{il,tn,va}	=> {ky}	0.09117047	0.9337456	7.129880	3171
## [2279]	{ct,il,ma}	=> {pa}	0.09117047	0.9753922	6.197500	3171
## [2280]	{ct,ma,pa}	=> {il}	0.09117047	0.8540264	5.748769	3171
## [2281]	{ct,il,pa}	=> {ma}	0.09117047	0.9577167	6.711736	3171
## [2282]	{il,ma,pa}	=> {ct}	0.09117047	0.9392773	7.439991	3171
## [2283]	{ct,vt}	=> {ny}	0.09114172	0.9820322	5.916519	3170
## [2284]	{ny,vt}	=> {ct}	0.09114172	0.9031339	7.153701	3170
## [2285]	{ct,ny}	=> {vt}	0.09114172	0.7671830	7.186477	3170
## [2286]	{in,ma}	=> {pa}	0.09114172	0.9646987	6.129555	3170
## [2287]	{in,pa}	=> {ma}	0.09114172	0.8384025	5.875575	3170
## [2288]	{ma,pa}	=> {in}	0.09114172	0.7666264	6.005412	3170
## [2289]	{md,nj,tn}	=> {va}	0.09114172	0.9847779	6.075126	3170
## [2290]	{nj,tn,va}	=> {md}	0.09114172	0.9644052	6.566754	3170
## [2291]	{md,tn,va}	=> {nj}	0.09114172	0.8668307	6.252435	3170
## [2292]	{md,nj,va}	=> {tn}	0.09114172	0.8421892	5.977996	3170
## [2293]	{il,in,mi}	=> {pa}	0.09114172	0.9279859	5.896288	3170
## [2294]	{in,mi,pa}	=> {il}	0.09114172	0.9652862	6.497701	3170
## [2295]	{il,in,pa}	=> {mi}	0.09114172	0.8849805	6.502008	3170
## [2296]	{il,mi,pa}	=> {in}	0.09114172	0.9236597	7.235542	3170
## [2297]	{il,ma,nj}	=> {ny}	0.09114172	0.9856965	5.938595	3170
## [2298]	{ma,nj,ny}	=> {il}	0.09114172	0.8430851	5.675120	3170
## [2299]	{il,nj,ny}	=> {ma}	0.09114172	0.9193735	6.443025	3170
## [2300]	{il,ma,ny}	=> {nj}	0.09114172	0.9258178	6.677907	3170
## [2301]	{al,fl}	=> {tx}	0.09111296	0.7615958	3.122606	3169
## [2302]	{fl,tx}	=> {al}	0.09111296	0.8682192	5.295954	3169
## [2303]	{al,tx}	=> {fl}	0.09111296	0.8459690	4.443989	3169
## [2304]	{ct,in}	=> {ny}	0.09111296	0.9814184	5.912821	3169
## [2305]	{ct,ny}	=> {in}	0.09111296	0.7669409	6.007877	3169
## [2306]	{in,ny}	=> {ct}	0.09111296	0.8618439	6.826644	3169
## [2307]	{ct,nc}	=> {ny}	0.09111296	0.9714899	5.853004	3169
## [2308]	{ct,ny}	=> {nc}	0.09111296	0.7669409	4.501345	3169

## [2309]	{nc,ny}	=> {ct}	0.09111296	0.8432677	6.679502	3169
## [2310]	{in,wv}	=> {pa}	0.09108421	0.9611650	6.107103	3168
## [2311]	{pa,wv}	=> {in}	0.09108421	0.8545994	6.694554	3168
## [2312]	{in,pa}	=> {wv}	0.09108421	0.8378736	7.174318	3168
## [2313]	{ky,sc}	=> {ga}	0.09108421	0.9476518	5.547001	3168
## [2314]	{ga,ky}	=> {sc}	0.09108421	0.8898876	5.697935	3168
## [2315]	{mo,nc}	=> {va}	0.09108421	0.9524955	5.875975	3168
## [2316]	{mo,va}	=> {nc}	0.09108421	0.9023070	5.295839	3168
## [2317]	{in,nj,oh}	=> {ny}	0.09108421	0.9655593	5.817273	3168
## [2318]	{in,nj,ny}	=> {oh}	0.09108421	0.9611650	7.005507	3168
## [2319]	{in,ny,oh}	=> {nj}	0.09108421	0.9108683	6.570077	3168
## [2320]	{nj,ny,oh}	=> {in}	0.09108421	0.8908886	6.978828	3168
## [2321]	{de,md}	=> {nc}	0.09105546	0.9276508	5.444587	3167
## [2322]	{de,nc}	=> {md}	0.09105546	0.9717705	6.616905	3167
## [2323]	{md,nc}	=> {de}	0.09105546	0.7609322	7.290905	3167
## [2324]	{ar,ok}	=> {tx}	0.09105546	0.8893569	3.646437	3167
## [2325]	{ok,tx}	=> {ar}	0.09105546	0.7716862	5.822129	3167
## [2326]	{ar,tx}	=> {ok}	0.09105546	0.8634133	6.456757	3167
## [2327]	{in,wv}	=> {il}	0.09105546	0.9608617	6.467917	3167
## [2328]	{il,wv}	=> {in}	0.09105546	0.9339428	7.316096	3167
## [2329]	{il,in}	=> {wv}	0.09105546	0.7660861	6.559636	3167
## [2330]	{mi,nj}	=> {il}	0.09105546	0.9108427	6.131221	3167
## [2331]	{il,nj}	=> {mi}	0.09105546	0.8674336	6.373090	3167
## [2332]	{il,mi}	=> {nj}	0.09105546	0.8358406	6.028903	3167
## [2333]	{fl,ms,sc}	=> {nc}	0.09105546	0.9353219	5.489610	3167
## [2334]	{fl,ms,nc}	=> {sc}	0.09105546	0.9762639	6.251000	3167
## [2335]	{fl,nc,sc}	=> {ms}	0.09105546	0.8992050	6.495379	3167
## [2336]	{ms,nc,sc}	=> {fl}	0.09105546	0.8564089	4.498831	3167
## [2337]	{ma,mi,nj}	=> {pa}	0.09105546	0.9786774	6.218374	3167
## [2338]	{ma,nj,pa}	=> {mi}	0.09105546	0.8657736	6.360894	3167
## [2339]	{mi,nj,pa}	=> {ma}	0.09105546	0.9389268	6.580055	3167
## [2340]	{ma,mi,pa}	=> {nj}	0.09105546	0.9241319	6.665747	3167
## [2341]	{me,on}	=> {ny}	0.09102671	0.9530403	5.741849	3166
## [2342]	{me,ny}	=> {on}	0.09102671	0.8762801	6.013792	3166
## [2343]	{ny,on}	=> {me}	0.09102671	0.7733268	6.776790	3166
## [2344]	{in,on}	=> {il}	0.09102671	0.9623100	6.477667	3166
## [2345]	{il,in}	=> {on}	0.09102671	0.7658442	5.255886	3166
## [2346]	{il,on}	=> {in}	0.09102671	0.8841106	6.925732	3166
## [2347]	{in,nj,oh}	=> {il}	0.09102671	0.9649497	6.495436	3166
## [2348]	{il,in,nj}	=> {oh}	0.09102671	0.9631883	7.020254	3166
## [2349]	{il,in,oh}	=> {nj}	0.09102671	0.8501611	6.132197	3166
## [2350]	{il,nj,oh}	=> {in}	0.09102671	0.9366864	7.337588	3166
## [2351]	{mi,vt}	=> {ny}	0.09099796	0.9786642	5.896227	3165
## [2352]	{ny,vt}	=> {mi}	0.09099796	0.9017094	6.624916	3165
## [2353]	{mi,ny}	=> {vt}	0.09099796	0.7747858	7.257696	3165
## [2354]	{ma,wi}	=> {mi}	0.09099796	0.9450582	6.943403	3165
## [2355]	{mi,wi}	=> {ma}	0.09099796	0.8294025	5.812502	3165
## [2356]	{ma,mi}	=> {wi}	0.09099796	0.8704620	7.006605	3165
## [2357]	{ct,ma,nj}	=> {oh}	0.09099796	0.8885458	6.476218	3165
## [2358]	{ct,nj,oh}	=> {ma}	0.09099796	0.9640573	6.756171	3165
## [2359]	{ct,ma,oh}	=> {nj}	0.09099796	0.9397268	6.778233	3165
## [2360]	{ma,nj,oh}	=> {ct}	0.09099796	0.9530262	7.548896	3165
## [2361]	{ga,ky,nc,tn}	=> {va}	0.09099796	0.9774552	6.029952	3165
## [2362]	{ga,ky,tn,va}	=> {nc}	0.09099796	0.9762492	5.729822	3165

## [2363]	{ga,ky,nc,va}	=> {tn}	0.09099796	0.9729480	6.906144	3165
## [2364]	{ky,nc,tn,va}	=> {ga}	0.09099796	0.9176573	5.371430	3165
## [2365]	{ga,nc,tn,va}	=> {ky}	0.09099796	0.8892947	6.790463	3165
## [2366]	{ct,nh}	=> {ma}	0.09096921	0.9887500	6.929219	3164
## [2367]	{ma,nh}	=> {ct}	0.09096921	0.9515789	7.537433	3164
## [2368]	{ct,ma}	=> {nh}	0.09096921	0.7911978	7.570468	3164
## [2369]	{in,nj}	=> {va}	0.09096921	0.9178996	5.662552	3164
## [2370]	{in,va}	=> {nj}	0.09096921	0.8661374	6.247434	3164
## [2371]	{nj,va}	=> {in}	0.09096921	0.7839445	6.141075	3164
## [2372]	{ga,nc,va}	=> {pa}	0.09096921	0.7672163	4.874781	3164
## [2373]	{ga,nc,pa}	=> {va}	0.09096921	0.9774483	6.029909	3164
## [2374]	{ga,pa,va}	=> {nc}	0.09096921	0.9780526	5.740406	3164
## [2375]	{nc,pa,va}	=> {ga}	0.09096921	0.8435084	4.937406	3164
## [2376]	{ct,nh}	=> {ny}	0.09094046	0.9884375	5.955109	3163
## [2377]	{nh,ny}	=> {ct}	0.09094046	0.9160151	7.255732	3163
## [2378]	{ct,ny}	=> {nh}	0.09094046	0.7654889	7.324475	3163
## [2379]	{ar,sc}	=> {al}	0.09094046	0.9424911	5.748997	3163
## [2380]	{al,ar}	=> {sc}	0.09094046	0.8737569	5.594650	3163
## [2381]	{ct,mi,nj}	=> {ny}	0.09094046	0.9930926	5.983155	3163
## [2382]	{ct,nj,ny}	=> {mi}	0.09094046	0.8613834	6.328639	3163
## [2383]	{ct,mi,ny}	=> {nj}	0.09094046	0.9229647	6.657328	3163
## [2384]	{mi,nj,ny}	=> {ct}	0.09094046	0.9286553	7.355855	3163
## [2385]	{al,ga,ms,sc}	=> {va}	0.09094046	0.8504974	5.246746	3163
## [2386]	{al,ms,sc,va}	=> {ga}	0.09094046	0.9829086	5.753374	3163
## [2387]	{ga,ms,sc,va}	=> {al}	0.09094046	0.9777434	5.964029	3163
## [2388]	{al,ga,ms,va}	=> {sc}	0.09094046	0.9652121	6.180236	3163
## [2389]	{al,ga,sc,va}	=> {ms}	0.09094046	0.8837664	6.383859	3163
## [2390]	{nc,nj,pa,va}	=> {ny}	0.09094046	0.9470060	5.705494	3163
## [2391]	{nc,nj,ny,va}	=> {pa}	0.09094046	0.9628615	6.117882	3163
## [2392]	{nc,nj,ny,pa}	=> {va}	0.09094046	0.9738300	6.007588	3163
## [2393]	{nj,ny,pa,va}	=> {nc}	0.09094046	0.8988349	5.275460	3163
## [2394]	{nc,ny,pa,va}	=> {nj}	0.09094046	0.9355220	6.747904	3163
## [2395]	{ma,me}	=> {pa}	0.09088295	0.9109510	5.788050	3161
## [2396]	{me,pa}	=> {ma}	0.09088295	0.9625457	6.745578	3161
## [2397]	{ma,pa}	=> {me}	0.09088295	0.7644498	6.699000	3161
## [2398]	{in,wv}	=> {va}	0.09088295	0.9590413	5.916356	3161
## [2399]	{va,wv}	=> {in}	0.09088295	0.8406915	6.585606	3161
## [2400]	{in,va}	=> {wv}	0.09088295	0.8653162	7.409296	3161
## [2401]	{ct,ma,me}	=> {ny}	0.09088295	0.9828980	5.921735	3161
## [2402]	{ct,me,ny}	=> {ma}	0.09088295	0.9847352	6.901083	3161
## [2403]	{ma,me,ny}	=> {ct}	0.09088295	0.9458408	7.491981	3161
## [2404]	{ct,ma,ny}	=> {me}	0.09088295	0.8149007	7.141109	3161
## [2405]	{ky,oh,tn}	=> {va}	0.09088295	0.9555623	5.894894	3161
## [2406]	{ky,tn,va}	=> {oh}	0.09088295	0.8667398	6.317283	3161
## [2407]	{ky,oh,va}	=> {tn}	0.09088295	0.9374259	6.654002	3161
## [2408]	{oh,tn,va}	=> {ky}	0.09088295	0.9396552	7.175005	3161
## [2409]	{il,md,va}	=> {ny}	0.09088295	0.9018545	5.433466	3161
## [2410]	{md,ny,va}	=> {il}	0.09088295	0.8520216	5.735274	3161
## [2411]	{il,md,ny}	=> {va}	0.09088295	0.9433005	5.819251	3161
## [2412]	{il,ny,va}	=> {md}	0.09088295	0.9371479	6.381156	3161
## [2413]	{al,ms,nc,sc}	=> {va}	0.09088295	0.8849384	5.459213	3161
## [2414]	{al,ms,sc,va}	=> {nc}	0.09088295	0.9822871	5.765260	3161
## [2415]	{ms,nc,sc,va}	=> {al}	0.09088295	0.9705250	5.919998	3161
## [2416]	{al,ms,nc,va}	=> {sc}	0.09088295	0.9622527	6.161287	3161

## [2417]	{al,nc,sc,va}	=> {ms}	0.09088295	0.8761086	6.328543	3161
## [2418]	{ga,la}	=> {va}	0.09085420	0.7921785	4.886974	3160
## [2419]	{la,va}	=> {ga}	0.09085420	0.9275022	5.429057	3160
## [2420]	{mi,pa,va}	=> {ny}	0.09085420	0.9702180	5.845341	3160
## [2421]	{mi,ny,va}	=> {pa}	0.09085420	0.9795412	6.223863	3160
## [2422]	{mi,ny,pa}	=> {va}	0.09085420	0.8524413	5.258737	3160
## [2423]	{ny,pa,va}	=> {mi}	0.09085420	0.8248499	6.060225	3160
## [2424]	{ct,mi,oh}	=> {ny}	0.09082545	0.9884230	5.955022	3159
## [2425]	{ct,mi,ny}	=> {oh}	0.09082545	0.9217975	6.718575	3159
## [2426]	{ct,ny,oh}	=> {mi}	0.09082545	0.9093264	6.680879	3159
## [2427]	{mi,ny,oh}	=> {ct}	0.09082545	0.8928773	7.072459	3159
## [2428]	{in,md,pa}	=> {ny}	0.09082545	0.9410188	5.669422	3159
## [2429]	{in,md,ny}	=> {pa}	0.09082545	0.9834994	6.249012	3159
## [2430]	{in,ny,pa}	=> {md}	0.09082545	0.9012839	6.136953	3159
## [2431]	{md,ny,pa}	=> {in}	0.09082545	0.8258824	6.469598	3159
## [2432]	{ma,md,nj,va}	=> {ny}	0.09082545	0.9859551	5.940153	3159
## [2433]	{ma,md,nj,ny}	=> {va}	0.09082545	0.9472264	5.843469	3159
## [2434]	{ma,nj,ny,va}	=> {md}	0.09082545	0.9543807	6.498495	3159
## [2435]	{md,nj,ny,va}	=> {ma}	0.09082545	0.9088032	6.368947	3159
## [2436]	{ma,md,ny,va}	=> {nj}	0.09082545	0.9648748	6.959625	3159
## [2437]	{md,oh,tn}	=> {va}	0.09079670	0.9813549	6.054009	3158
## [2438]	{oh,tn,va}	=> {md}	0.09079670	0.9387634	6.392155	3158
## [2439]	{md,tn,va}	=> {oh}	0.09079670	0.8635494	6.294030	3158
## [2440]	{md,oh,va}	=> {tn}	0.09079670	0.8925947	6.335783	3158
## [2441]	{ct,md,nj}	=> {va}	0.09079670	0.9492035	5.855666	3158
## [2442]	{ct,nj,va}	=> {md}	0.09079670	0.9532146	6.490555	3158
## [2443]	{ct,md,va}	=> {nj}	0.09079670	0.9613394	6.934124	3158
## [2444]	{md,nj,va}	=> {ct}	0.09079670	0.8390011	6.645706	3158
## [2445]	{ct,il,oh}	=> {ny}	0.09079670	0.9841072	5.929020	3158
## [2446]	{ct,ny,oh}	=> {il}	0.09079670	0.9090386	6.119077	3158
## [2447]	{ct,il,ny}	=> {oh}	0.09079670	0.9421241	6.866726	3158
## [2448]	{il,ny,oh}	=> {ct}	0.09079670	0.8714128	6.902439	3158
## [2449]	{in,pa,va}	=> {ny}	0.09079670	0.9315634	5.612456	3158
## [2450]	{in,ny,va}	=> {pa}	0.09079670	0.9780118	6.214145	3158
## [2451]	{in,ny,pa}	=> {va}	0.09079670	0.9009986	5.558289	3158
## [2452]	{ny,pa,va}	=> {in}	0.09079670	0.8243279	6.457420	3158
## [2453]	{md,wv}	=> {il}	0.09076795	0.8735473	5.880172	3157
## [2454]	{il,wv}	=> {md}	0.09076795	0.9309938	6.339251	3157
## [2455]	{il,md}	=> {wv}	0.09076795	0.8447953	7.233586	3157
## [2456]	{in,wi}	=> {mi}	0.09076795	0.9418258	6.919654	3157
## [2457]	{mi,wi}	=> {in}	0.09076795	0.8273061	6.480751	3157
## [2458]	{in,mi}	=> {wi}	0.09076795	0.8882949	7.150147	3157
## [2459]	{in,nj}	=> {md}	0.09076795	0.9158689	6.236264	3157
## [2460]	{in,md}	=> {nj}	0.09076795	0.8930693	6.441693	3157
## [2461]	{md,nj}	=> {in}	0.09076795	0.7882647	6.174917	3157
## [2462]	{ct,oh}	=> {va}	0.09073920	0.8892646	5.485901	3156
## [2463]	{ct,va}	=> {oh}	0.09073920	0.8950652	6.523735	3156
## [2464]	{oh,va}	=> {ct}	0.09073920	0.8127736	6.437959	3156
## [2465]	{la,ms}	=> {ar}	0.09071045	0.7738533	5.838480	3155
## [2466]	{ar,ms}	=> {la}	0.09071045	0.9094840	6.137517	3155
## [2467]	{ar,la}	=> {ms}	0.09071045	0.8825175	6.374837	3155
## [2468]	{md,on}	=> {ny}	0.09071045	0.9734650	5.864903	3155
## [2469]	{md,ny}	=> {on}	0.09071045	0.7780518	5.339664	3155
## [2470]	{ny,on}	=> {md}	0.09071045	0.7706400	5.247382	3155

## [2471]	{al,ga,ms}	=> {tx}	0.09071045	0.7792047	3.194804	3155
## [2472]	{al,ms,tx}	=> {ga}	0.09071045	0.9364797	5.481605	3155
## [2473]	{ga,ms,tx}	=> {al}	0.09071045	0.9698740	5.916027	3155
## [2474]	{al,ga,tx}	=> {ms}	0.09071045	0.9359241	6.760618	3155
## [2475]	{md,tn,wv}	=> {va}	0.09071045	0.9874804	6.091798	3155
## [2476]	{tn,va,wv}	=> {md}	0.09071045	0.9448937	6.433897	3155
## [2477]	{md,va,wv}	=> {tn}	0.09071045	0.9053085	6.426027	3155
## [2478]	{md,tn,va}	=> {wv}	0.09071045	0.8627290	7.387144	3155
## [2479]	{nj,pa,wv}	=> {ny}	0.09071045	0.9624771	5.798704	3155
## [2480]	{nj,ny,wv}	=> {pa}	0.09071045	0.9902699	6.292031	3155
## [2481]	{ny,pa,wv}	=> {nj}	0.09071045	0.9271231	6.687323	3155
## [2482]	{nj,ny,pa}	=> {wv}	0.09071045	0.7917189	6.779118	3155
## [2483]	{ky,md,oh}	=> {va}	0.09071045	0.9725647	5.999783	3155
## [2484]	{ky,oh,va}	=> {md}	0.09071045	0.9356465	6.370932	3155
## [2485]	{ky,md,va}	=> {oh}	0.09071045	0.8980928	6.545802	3155
## [2486]	{md,oh,va}	=> {ky}	0.09071045	0.8917467	6.809186	3155
## [2487]	{ct,mi,on}	=> {ny}	0.09071045	0.9890282	5.958668	3155
## [2488]	{ct,mi,ny}	=> {on}	0.09071045	0.9206303	6.318161	3155
## [2489]	{ct,ny,on}	=> {mi}	0.09071045	0.9287607	6.823664	3155
## [2490]	{mi,ny,on}	=> {ct}	0.09071045	0.8613159	6.822461	3155
## [2491]	{md,mi,pa}	=> {ny}	0.09071045	0.9740661	5.868525	3155
## [2492]	{md,mi,ny}	=> {pa}	0.09071045	0.9816428	6.237216	3155
## [2493]	{mi,ny,pa}	=> {md}	0.09071045	0.8510925	5.795194	3155
## [2494]	{md,ny,pa}	=> {mi}	0.09071045	0.8248366	6.060127	3155
## [2495]	{ct,ma,on,pa}	=> {ny}	0.09071045	0.9915148	5.973649	3155
## [2496]	{ct,ma,ny,on}	=> {pa}	0.09071045	0.9618902	6.111711	3155
## [2497]	{ct,ma,ny,pa}	=> {on}	0.09071045	0.8624932	5.919174	3155
## [2498]	{ct,ny,on,pa}	=> {ma}	0.09071045	0.9737654	6.824206	3155
## [2499]	{ma,ny,on,pa}	=> {ct}	0.09071045	0.9497291	7.522780	3155
## [2500]	{fl,la}	=> {nc}	0.09068169	0.8202861	4.814440	3154
## [2501]	{fl,nc}	=> {la}	0.09068169	0.8533550	5.758739	3154
## [2502]	{la,nc}	=> {fl}	0.09068169	0.8522021	4.476732	3154
## [2503]	{ct,oh}	=> {md}	0.09068169	0.8887010	6.051275	3154
## [2504]	{ct,md}	=> {oh}	0.09068169	0.8957682	6.528859	3154
## [2505]	{md,oh}	=> {ct}	0.09068169	0.8379384	6.637289	3154
## [2506]	{ma,oh}	=> {on}	0.09068169	0.8631637	5.923776	3154
## [2507]	{ma,on}	=> {oh}	0.09068169	0.8633999	6.292941	3154
## [2508]	{oh,on}	=> {ma}	0.09068169	0.8847125	6.200118	3154
## [2509]	{ga,md,nc,tn}	=> {va}	0.09068169	0.9924481	6.122444	3154
## [2510]	{ga,md,tn,va}	=> {nc}	0.09068169	0.9831671	5.770424	3154
## [2511]	{ga,nc,tn,va}	=> {md}	0.09068169	0.8862040	6.034272	3154
## [2512]	{ga,md,nc,va}	=> {tn}	0.09068169	0.9052813	6.425834	3154
## [2513]	{md,nc,tn,va}	=> {ga}	0.09068169	0.9039839	5.291394	3154
## [2514]	{ar,tn}	=> {nc}	0.09065294	0.8844320	5.190926	3153
## [2515]	{ar,nc}	=> {tn}	0.09065294	0.9060345	6.431181	3153
## [2516]	{il,in,nj}	=> {ny}	0.09065294	0.9592333	5.779161	3153
## [2517]	{in,nj,ny}	=> {il}	0.09065294	0.9566141	6.439325	3153
## [2518]	{il,in,ny}	=> {nj}	0.09065294	0.9036973	6.518353	3153
## [2519]	{il,nj,ny}	=> {in}	0.09065294	0.9144432	7.163344	3153
## [2520]	{ma,nj,on}	=> {ny}	0.09065294	0.9915094	5.973617	3153
## [2521]	{ma,nj,ny}	=> {on}	0.09065294	0.8385638	5.754950	3153
## [2522]	{nj,ny,on}	=> {ma}	0.09065294	0.9465626	6.633567	3153
## [2523]	{ma,ny,on}	=> {nj}	0.09065294	0.8914334	6.429893	3153
## [2524]	{il,md,oh,va}	=> {pa}	0.09065294	0.9722479	6.177522	3153

```

## [2525] {md,oh,pa,va} => {il} 0.09065294 0.9192420 6.187760 3153
## [2526] {il,md,oh,pa} => {va} 0.09065294 0.9545867 5.888876 3153
## [2527] {il,oh,pa,va} => {md} 0.09065294 0.9431648 6.422125 3153
## [2528] {il,md,pa,va} => {oh} 0.09065294 0.9542978 6.955455 3153
## [2529] {ct,il,oh} => {pa} 0.09062419 0.9822375 6.240994 3152
## [2530] {ct,oh,pa} => {il} 0.09062419 0.9120370 6.139261 3152
## [2531] {ct,il,pa} => {oh} 0.09062419 0.9519783 6.938549 3152
## [2532] {il,oh,pa} => {ct} 0.09062419 0.8468565 6.707929 3152
## [2533] {al,ga,la,ms,sc} => {nc} 0.09062419 0.9482551 5.565518 3152
## [2534] {al,la,ms,nc,sc} => {ga} 0.09062419 0.9883976 5.785503 3152
## [2535] {ga,la,ms,nc,sc} => {al} 0.09062419 0.9791861 5.972829 3152
## [2536] {al,ga,la,ms,nc} => {sc} 0.09062419 0.9791861 6.269711 3152
## [2537] {al,ga,ms,nc,sc} => {la} 0.09062419 0.8957090 6.044559 3152
## [2538] {al,ga,la,nc,sc} => {ms} 0.09062419 0.9624427 6.952175 3152
## [2539] {nc,oh,tn} => {va} 0.09059544 0.9791796 6.040590 3151
## [2540] {oh,tn,va} => {nc} 0.09059544 0.9366825 5.497596 3151
## [2541] {nc,tn,va} => {oh} 0.09059544 0.7949041 5.793705 3151
## [2542] {nc,oh,va} => {tn} 0.09059544 0.9237760 6.557113 3151
## [2543] {il,nc,va} => {pa} 0.09059544 0.9141282 5.808238 3151
## [2544] {nc,pa,va} => {il} 0.09059544 0.8400427 5.654640 3151
## [2545] {il,nc,pa} => {va} 0.09059544 0.9728311 6.001426 3151
## [2546] {il,pa,va} => {nc} 0.09059544 0.8913720 5.231659 3151
## [2547] {ma,mi,nj,pa} => {ny} 0.09059544 0.9949479 5.994333 3151
## [2548] {ma,mi,nj,ny} => {pa} 0.09059544 0.9816199 6.237070 3151
## [2549] {ma,nj,ny,pa} => {mi} 0.09059544 0.8760078 6.436085 3151
## [2550] {mi,nj,ny,pa} => {ma} 0.09059544 0.9468149 6.635335 3151
## [2551] {ma,mi,ny,pa} => {nj} 0.09059544 0.9333531 6.732259 3151
## [2552] {sc,va} => {pa} 0.09056669 0.7555769 4.800826 3150
## [2553] {pa,sc} => {va} 0.09056669 0.9589041 5.915510 3150
## [2554] {fl,la,ms} => {sc} 0.09056669 0.9178322 5.876863 3150
## [2555] {fl,ms,sc} => {la} 0.09056669 0.9303012 6.277999 3150
## [2556] {fl,la,sc} => {ms} 0.09056669 0.9557039 6.903497 3150
## [2557] {la,ms,sc} => {fl} 0.09056669 0.8992292 4.723772 3150
## [2558] {ky,nc,sc} => {va} 0.09056669 0.9728227 6.001374 3150
## [2559] {ky,sc,va} => {nc} 0.09056669 0.9819202 5.763106 3150
## [2560] {nc,sc,va} => {ky} 0.09056669 0.7743363 5.912665 3150
## [2561] {ky,nc,va} => {sc} 0.09056669 0.8716104 5.580906 3150
## [2562] {il,ma,nj} => {pa} 0.09056669 0.9794776 6.223458 3150
## [2563] {ma,nj,pa} => {il} 0.09056669 0.8611263 5.796562 3150
## [2564] {il,nj,pa} => {ma} 0.09056669 0.9002572 6.309056 3150
## [2565] {il,ma,pa} => {nj} 0.09056669 0.9330569 6.730123 3150
## [2566] {ct,ma,nj,va} => {ny} 0.09053794 0.9911867 5.971672 3149
## [2567] {ct,ma,nj,ny} => {va} 0.09053794 0.8935868 5.512565 3149
## [2568] {ct,nj,ny,va} => {ma} 0.09053794 0.9653587 6.765291 3149
## [2569] {ct,ma,ny,va} => {nj} 0.09053794 0.9574339 6.905953 3149
## [2570] {ma,nj,ny,va} => {ct} 0.09053794 0.9513595 7.535695 3149
## [2571] {ar,ga} => {va} 0.09050919 0.8827818 5.445909 3148
## [2572] {ar,va} => {ga} 0.09050919 0.9095637 5.324055 3148
## [2573] {ky,md} => {ny} 0.09050919 0.8676957 5.227667 3148
## [2574] {ky,ny} => {md} 0.09050919 0.9145845 6.227519 3148
## [2575] {md,ny} => {ky} 0.09050919 0.7763255 5.927855 3148
## [2576] {ma,md,oh} => {pa} 0.09050919 0.9899371 6.289916 3148
## [2577] {ma,oh,pa} => {md} 0.09050919 0.8930496 6.080885 3148
## [2578] {ma,md,pa} => {oh} 0.09050919 0.9082516 6.619845 3148

```

## [2579]	{md,oh,pa}	=> {ma}	0.09050919	0.8691331	6.090936	3148
## [2580]	{al,nc,sc,tn}	=> {va}	0.09050919	0.9615150	5.931616	3148
## [2581]	{al,sc,tn,va}	=> {nc}	0.09050919	0.9855980	5.784692	3148
## [2582]	{al,nc,sc,va}	=> {tn}	0.09050919	0.8725055	6.193187	3148
## [2583]	{nc,sc,tn,va}	=> {al}	0.09050919	0.9188558	5.604827	3148
## [2584]	{al,nc,tn,va}	=> {sc}	0.09050919	0.9335706	5.977636	3148
## [2585]	{la,sc}	=> {va}	0.09048043	0.8316596	5.130534	3147
## [2586]	{la,va}	=> {sc}	0.09048043	0.9236865	5.914349	3147
## [2587]	{sc,va}	=> {la}	0.09048043	0.7548573	5.094042	3147
## [2588]	{ct,vt}	=> {ma}	0.09048043	0.9749071	6.832207	3147
## [2589]	{ma,vt}	=> {ct}	0.09048043	0.9498944	7.524089	3147
## [2590]	{ct,ma}	=> {vt}	0.09048043	0.7869467	7.371612	3147
## [2591]	{md,sc}	=> {al}	0.09048043	0.8897371	5.427209	3147
## [2592]	{al,md}	=> {sc}	0.09048043	0.9014609	5.772038	3147
## [2593]	{ky,mo}	=> {in}	0.09048043	0.8857304	6.938421	3147
## [2594]	{in,ky}	=> {mo}	0.09048043	0.8837405	6.627292	3147
## [2595]	{in,mo}	=> {ky}	0.09048043	0.9019776	6.887307	3147
## [2596]	{ga,nj}	=> {va}	0.09048043	0.9718962	5.995659	3147
## [2597]	{nj,va}	=> {ga}	0.09048043	0.7797324	4.564098	3147
## [2598]	{ga,la,ms}	=> {tx}	0.09048043	0.8579607	3.517710	3147
## [2599]	{la,ms,tx}	=> {ga}	0.09048043	0.9024950	5.282679	3147
## [2600]	{ga,ms,tx}	=> {la}	0.09048043	0.9674147	6.528454	3147
## [2601]	{ga,la,tx}	=> {ms}	0.09048043	0.9382826	6.777655	3147
## [2602]	{il,ma,oh,pa}	=> {ny}	0.09048043	0.9855935	5.937975	3147
## [2603]	{il,ma,ny,oh}	=> {pa}	0.09048043	0.9803738	6.229153	3147
## [2604]	{ma,ny,oh,pa}	=> {il}	0.09048043	0.9095376	6.122436	3147
## [2605]	{il,ma,ny,pa}	=> {oh}	0.09048043	0.9521936	6.940119	3147
## [2606]	{il,ny,oh,pa}	=> {ma}	0.09048043	0.9035314	6.332002	3147
## [2607]	{ma,wi}	=> {pa}	0.09045168	0.9393849	5.968715	3146
## [2608]	{pa,wi}	=> {ma}	0.09045168	0.8942581	6.267014	3146
## [2609]	{ma,pa}	=> {wi}	0.09045168	0.7608222	6.124082	3146
## [2610]	{ma,oh,va}	=> {pa}	0.09045168	0.9865161	6.268180	3146
## [2611]	{ma,oh,pa}	=> {va}	0.09045168	0.8924823	5.505751	3146
## [2612]	{ma,pa,va}	=> {oh}	0.09045168	0.9063670	6.606109	3146
## [2613]	{oh,pa,va}	=> {ma}	0.09045168	0.8569872	6.005817	3146
## [2614]	{md,oh,va,wv}	=> {pa}	0.09045168	0.9770186	6.207834	3146
## [2615]	{md,oh,pa,wv}	=> {va}	0.09045168	0.9727891	6.001167	3146
## [2616]	{oh,pa,va,wv}	=> {md}	0.09045168	0.9644390	6.566984	3146
## [2617]	{md,pa,va,wv}	=> {oh}	0.09045168	0.9430456	6.873443	3146
## [2618]	{md,oh,pa,va}	=> {wv}	0.09045168	0.9172012	7.853563	3146
## [2619]	{ct,ma,nj,oh}	=> {ny}	0.09045168	0.9939968	5.988603	3146
## [2620]	{ct,ma,nj,ny}	=> {oh}	0.09045168	0.8927355	6.506755	3146
## [2621]	{ct,nj,ny,oh}	=> {ma}	0.09045168	0.9694915	6.794254	3146
## [2622]	{ct,ma,ny,oh}	=> {nj}	0.09045168	0.9447447	6.814427	3146
## [2623]	{ma,nj,ny,oh}	=> {ct}	0.09045168	0.9585619	7.592744	3146
## [2624]	{ct,md,pa,va}	=> {ny}	0.09045168	0.9858978	5.939808	3146
## [2625]	{ct,md,ny,va}	=> {pa}	0.09045168	0.9758065	6.200132	3146
## [2626]	{ct,md,ny,pa}	=> {va}	0.09045168	0.9396655	5.796826	3146
## [2627]	{ct,ny,pa,va}	=> {md}	0.09045168	0.9467349	6.446434	3146
## [2628]	{md,ny,pa,va}	=> {ct}	0.09045168	0.8849508	7.009673	3146
## [2629]	{mi,mn}	=> {on}	0.09042293	0.9296482	6.380050	3145
## [2630]	{mn,on}	=> {mi}	0.09042293	0.9382458	6.893352	3145
## [2631]	{mi,on}	=> {mn}	0.09042293	0.7848765	6.948025	3145
## [2632]	{tn,wv}	=> {oh}	0.09042293	0.9177123	6.688799	3145

## [2633]	{oh,wv}	=> {tn}	0.09042293	0.8841721	6.275998	3145
## [2634]	{oh,tn}	=> {wv}	0.09042293	0.8826831	7.558001	3145
## [2635]	{ct,in}	=> {pa}	0.09042293	0.9739858	6.188564	3145
## [2636]	{ct,pa}	=> {in}	0.09042293	0.7982234	6.252929	3145
## [2637]	{in,pa}	=> {ct}	0.09042293	0.8317905	6.588592	3145
## [2638]	{md,tn,va}	=> {il}	0.09042293	0.8599945	5.788943	3145
## [2639]	{il,md,tn}	=> {va}	0.09042293	0.9812793	6.053543	3145
## [2640]	{il,tn,va}	=> {md}	0.09042293	0.9260895	6.305857	3145
## [2641]	{il,md,va}	=> {tn}	0.09042293	0.8972896	6.369108	3145
## [2642]	{ct,il,ma,pa}	=> {ny}	0.09042293	0.9918007	5.975372	3145
## [2643]	{ct,il,ma,ny}	=> {pa}	0.09042293	0.9797508	6.225194	3145
## [2644]	{ct,ma,ny,pa}	=> {il}	0.09042293	0.8597594	5.787361	3145
## [2645]	{ct,il,ny,pa}	=> {ma}	0.09042293	0.9644281	6.758770	3145
## [2646]	{il,ma,ny,pa}	=> {ct}	0.09042293	0.9515885	7.537508	3145
## [2647]	{il,oh,pa,va}	=> {ny}	0.09042293	0.9407718	5.667934	3145
## [2648]	{il,ny,oh,va}	=> {pa}	0.09042293	0.9828125	6.244648	3145
## [2649]	{ny,oh,pa,va}	=> {il}	0.09042293	0.9179802	6.179266	3145
## [2650]	{il,ny,oh,pa}	=> {va}	0.09042293	0.9029572	5.570372	3145
## [2651]	{il,ny,pa,va}	=> {oh}	0.09042293	0.9594265	6.992836	3145
## [2652]	{sc,tx}	=> {nc}	0.09039418	0.9037080	5.304061	3144
## [2653]	{nc,tx}	=> {sc}	0.09039418	0.9277073	5.940093	3144
## [2654]	{mi,oh}	=> {md}	0.09039418	0.8366152	5.696616	3144
## [2655]	{md,mi}	=> {oh}	0.09039418	0.9401914	6.852640	3144
## [2656]	{md,oh}	=> {mi}	0.09039418	0.8352816	6.136867	3144
## [2657]	{md,on}	=> {pa}	0.09039418	0.9700710	6.163690	3144
## [2658]	{on,pa}	=> {md}	0.09039418	0.8363927	5.695100	3144
## [2659]	{in,ky,va}	=> {il}	0.09039418	0.9658986	6.501823	3144
## [2660]	{il,in,ky}	=> {va}	0.09039418	0.9230769	5.694491	3144
## [2661]	{il,ky,va}	=> {in}	0.09039418	0.9290780	7.277987	3144
## [2662]	{il,in,va}	=> {ky}	0.09039418	0.9044879	6.906475	3144
## [2663]	{ky,md,oh}	=> {pa}	0.09039418	0.9691739	6.157990	3144
## [2664]	{ky,oh,pa}	=> {md}	0.09039418	0.9340463	6.360036	3144
## [2665]	{ky,md,pa}	=> {oh}	0.09039418	0.9390681	6.844453	3144
## [2666]	{md,oh,pa}	=> {ky}	0.09039418	0.8680287	6.628081	3144
## [2667]	{ma,mi,on}	=> {pa}	0.09039418	0.9524387	6.051657	3144
## [2668]	{ma,mi,pa}	=> {on}	0.09039418	0.9174205	6.296133	3144
## [2669]	{ma,on,pa}	=> {mi}	0.09039418	0.9310038	6.840145	3144
## [2670]	{mi,on,pa}	=> {ma}	0.09039418	0.9150175	6.412497	3144
## [2671]	{il,oh,on}	=> {ny}	0.09039418	0.9626454	5.799718	3144
## [2672]	{ny,oh,on}	=> {il}	0.09039418	0.9203747	6.195385	3144
## [2673]	{il,ny,oh}	=> {on}	0.09039418	0.8675497	5.953876	3144
## [2674]	{il,ny,on}	=> {oh}	0.09039418	0.9376678	6.834246	3144
## [2675]	{ar,la}	=> {al}	0.09036543	0.8791608	5.362696	3143
## [2676]	{al,la}	=> {ar}	0.09036543	0.7682718	5.796369	3143
## [2677]	{al,ar}	=> {la}	0.09036543	0.8682320	5.859134	3143
## [2678]	{nj,va,wv}	=> {pa}	0.09036543	0.9846491	6.256317	3143
## [2679]	{nj,pa,wv}	=> {va}	0.09036543	0.9588164	5.914968	3143
## [2680]	{pa,va,wv}	=> {nj}	0.09036543	0.8995421	6.488381	3143
## [2681]	{nj,pa,va}	=> {wv}	0.09036543	0.8455744	7.240257	3143
## [2682]	{md,tn,va}	=> {ny}	0.09036543	0.8594476	5.177975	3143
## [2683]	{md,ny,tn}	=> {va}	0.09036543	0.9824945	6.061040	3143
## [2684]	{ny,tn,va}	=> {md}	0.09036543	0.9532909	6.491075	3143
## [2685]	{md,ny,va}	=> {tn}	0.09036543	0.8471698	6.013350	3143
## [2686]	{il,in,oh,va}	=> {pa}	0.09036543	0.9567732	6.079198	3143

## [2687]	{in,oh,pa,va}	=> {il}	0.09036543	0.9623393	6.477864	3143
## [2688]	{il,in,oh,pa}	=> {va}	0.09036543	0.9139285	5.638054	3143
## [2689]	{il,in,pa,va}	=> {oh}	0.09036543	0.9691644	7.063811	3143
## [2690]	{il,oh,pa,va}	=> {in}	0.09036543	0.9401735	7.364904	3143
## [2691]	{mi,oh,on,pa}	=> {ny}	0.09036543	0.9840326	5.928570	3143
## [2692]	{mi,ny,oh,on}	=> {pa}	0.09036543	0.9691644	6.157929	3143
## [2693]	{mi,ny,oh,pa}	=> {on}	0.09036543	0.9217009	6.325509	3143
## [2694]	{mi,ny,on,pa}	=> {oh}	0.09036543	0.9334719	6.803665	3143
## [2695]	{ny,oh,on,pa}	=> {mi}	0.09036543	0.9527129	6.999643	3143
## [2696]	{md,nj,wv}	=> {pa}	0.09033668	0.9852618	6.260210	3142
## [2697]	{nj,pa,wv}	=> {md}	0.09033668	0.9585113	6.526621	3142
## [2698]	{md,pa,wv}	=> {nj}	0.09033668	0.9101970	6.565235	3142
## [2699]	{md,nj,pa}	=> {wv}	0.09033668	0.8423592	7.212727	3142
## [2700]	{ma,md,oh}	=> {ny}	0.09033668	0.9880503	5.952776	3142
## [2701]	{ma,ny,oh}	=> {md}	0.09033668	0.8843231	6.021465	3142
## [2702]	{ma,md,ny}	=> {oh}	0.09033668	0.8890775	6.480093	3142
## [2703]	{md,ny,oh}	=> {ma}	0.09033668	0.9059977	6.349286	3142
## [2704]	{nh,pa}	=> {ny}	0.09030793	0.9899149	5.964010	3141
## [2705]	{nh,ny}	=> {pa}	0.09030793	0.9096438	5.779744	3141
## [2706]	{ma,mi,oh,pa}	=> {ny}	0.09030793	0.9899149	5.964010	3141
## [2707]	{ma,mi,ny,oh}	=> {pa}	0.09030793	0.9797255	6.225033	3141
## [2708]	{ma,mi,ny,pa}	=> {oh}	0.09030793	0.9303910	6.781209	3141
## [2709]	{ma,ny,oh,pa}	=> {mi}	0.09030793	0.9078035	6.669690	3141
## [2710]	{mi,ny,oh,pa}	=> {ma}	0.09030793	0.9211144	6.455224	3141
## [2711]	{oh,wv}	=> {nc}	0.09027918	0.8827664	5.181150	3140
## [2712]	{nc,wv}	=> {oh}	0.09027918	0.9010043	6.567022	3140
## [2713]	{nc,oh}	=> {wv}	0.09027918	0.8845070	7.573619	3140
## [2714]	{in,ky}	=> {md}	0.09027918	0.8817748	6.004113	3140
## [2715]	{ky,md}	=> {in}	0.09027918	0.8654906	6.779872	3140
## [2716]	{in,md}	=> {ky}	0.09027918	0.8882603	6.782564	3140
## [2717]	{ma,oh,va}	=> {ny}	0.09027918	0.9846347	5.932198	3140
## [2718]	{ma,ny,oh}	=> {va}	0.09027918	0.8837602	5.451945	3140
## [2719]	{ma,ny,va}	=> {oh}	0.09027918	0.8917921	6.499879	3140
## [2720]	{ny,oh,va}	=> {ma}	0.09027918	0.8968866	6.285435	3140
## [2721]	{nc,oh,pa}	=> {ny}	0.09027918	0.9339679	5.626942	3140
## [2722]	{nc,ny,oh}	=> {pa}	0.09027918	0.9784980	6.217234	3140
## [2723]	{ny,oh,pa}	=> {nc}	0.09027918	0.8078209	4.741279	3140
## [2724]	{nc,ny,pa}	=> {oh}	0.09027918	0.8933144	6.510974	3140
## [2725]	{nj,wv}	=> {oh}	0.09025042	0.9398204	6.849935	3139
## [2726]	{oh,wv}	=> {nj}	0.09025042	0.8824852	6.365350	3139
## [2727]	{nj,oh}	=> {wv}	0.09025042	0.8458636	7.242734	3139
## [2728]	{ga,md}	=> {pa}	0.09025042	0.8569479	5.444922	3139
## [2729]	{ga,pa}	=> {md}	0.09025042	0.9320071	6.346151	3139
## [2730]	{in,mi}	=> {on}	0.09025042	0.8832302	6.061489	3139
## [2731]	{in,on}	=> {mi}	0.09025042	0.9541033	7.009858	3139
## [2732]	{mi,on}	=> {in}	0.09025042	0.7833791	6.136646	3139
## [2733]	{in,md}	=> {nc}	0.09025042	0.8879774	5.211735	3139
## [2734]	{in,nc}	=> {md}	0.09025042	0.9339482	6.359368	3139
## [2735]	{md,nc}	=> {in}	0.09025042	0.7542047	5.908107	3139
## [2736]	{nc,nj,tn}	=> {va}	0.09025042	0.9846299	6.074213	3139
## [2737]	{nj,tn,va}	=> {nc}	0.09025042	0.9549741	5.604954	3139
## [2738]	{nc,tn,va}	=> {nj}	0.09025042	0.7918769	5.711794	3139
## [2739]	{nc,nj,va}	=> {tn}	0.09025042	0.8690476	6.168642	3139
## [2740]	{ct,il,nj}	=> {ny}	0.09025042	0.9864865	5.943355	3139

## [2741]	{ct,nj,ny}	=> {il}	0.09025042	0.8548475	5.754297	3139
## [2742]	{ct,il,ny}	=> {nj}	0.09025042	0.9364558	6.754639	3139
## [2743]	{il,nj,ny}	=> {ct}	0.09025042	0.9103828	7.211119	3139
## [2744]	{md,nj,va}	=> {il}	0.09025042	0.8339532	5.613650	3139
## [2745]	{il,md,nj}	=> {va}	0.09025042	0.9561377	5.898444	3139
## [2746]	{il,nj,va}	=> {md}	0.09025042	0.9517890	6.480848	3139
## [2747]	{il,md,va}	=> {nj}	0.09025042	0.8955777	6.459786	3139
## [2748]	{ga,tx}	=> {nc}	0.09022167	0.8687708	5.099007	3138
## [2749]	{nc,tx}	=> {ga}	0.09022167	0.9259369	5.419894	3138
## [2750]	{ga,nj}	=> {nc}	0.09022167	0.9691167	5.687960	3138
## [2751]	{nc,nj}	=> {ga}	0.09022167	0.8339091	4.881217	3138
## [2752]	{oh,tn}	=> {ny}	0.09022167	0.8807185	5.306127	3138
## [2753]	{ny,tn}	=> {oh}	0.09022167	0.9082489	6.619825	3138
## [2754]	{ny,oh}	=> {tn}	0.09022167	0.7653659	5.432692	3138
## [2755]	{al,ga,md,nc}	=> {va}	0.09022167	0.9849341	6.076089	3138
## [2756]	{al,ga,md,va}	=> {nc}	0.09022167	0.9843162	5.777169	3138
## [2757]	{al,ga,nc,va}	=> {md}	0.09022167	0.8494857	5.784252	3138
## [2758]	{al,md,nc,va}	=> {ga}	0.09022167	0.9608083	5.624011	3138
## [2759]	{ga,md,nc,va}	=> {al}	0.09022167	0.9006889	5.494013	3138
## [2760]	{al,ga,ky}	=> {tn}	0.09019292	0.9724117	6.902337	3137
## [2761]	{al,ky,tn}	=> {ga}	0.09019292	0.9372572	5.486157	3137
## [2762]	{al,ga,tn}	=> {ky}	0.09019292	0.8706633	6.648198	3137
## [2763]	{ga,ky,tn}	=> {al}	0.09019292	0.9177882	5.598315	3137
## [2764]	{il,md,oh,pa}	=> {ny}	0.09019292	0.9497427	5.721982	3137
## [2765]	{il,md,ny,oh}	=> {pa}	0.09019292	0.9864780	6.267938	3137
## [2766]	{md,ny,oh,pa}	=> {il}	0.09019292	0.9194021	6.188838	3137
## [2767]	{il,ny,oh,pa}	=> {md}	0.09019292	0.9006604	6.132707	3137
## [2768]	{il,md,ny,pa}	=> {oh}	0.09019292	0.9575702	6.979306	3137
## [2769]	{il,md,nj}	=> {ny}	0.09016417	0.9552239	5.755005	3136
## [2770]	{md,nj,ny}	=> {il}	0.09016417	0.8505560	5.725409	3136
## [2771]	{il,nj,ny}	=> {md}	0.09016417	0.9095128	6.192984	3136
## [2772]	{il,md,ny}	=> {nj}	0.09016417	0.9358400	6.750198	3136
## [2773]	{md,nc,nj,pa}	=> {ny}	0.09016417	0.9523231	5.737528	3136
## [2774]	{md,nc,nj,ny}	=> {pa}	0.09016417	0.9655172	6.134756	3136
## [2775]	{md,nj,ny,pa}	=> {nc}	0.09016417	0.8833803	5.184754	3136
## [2776]	{nc,nj,ny,pa}	=> {md}	0.09016417	0.9655172	6.574326	3136
## [2777]	{md,nc,ny,pa}	=> {nj}	0.09016417	0.9514563	6.862837	3136
## [2778]	{in,ky,tn}	=> {il}	0.09013542	0.9595960	6.459398	3135
## [2779]	{il,ky,tn}	=> {in}	0.09013542	0.9239611	7.237903	3135
## [2780]	{il,in,ky}	=> {tn}	0.09013542	0.9204345	6.533395	3135
## [2781]	{il,in,tn}	=> {ky}	0.09013542	0.9465580	7.227713	3135
## [2782]	{in,mo,oh}	=> {il}	0.09013542	0.9861592	6.638204	3135
## [2783]	{il,in,mo}	=> {oh}	0.09013542	0.9153285	6.671425	3135
## [2784]	{il,mo,oh}	=> {in}	0.09013542	0.9465580	7.414917	3135
## [2785]	{il,in,oh}	=> {mo}	0.09013542	0.8418367	6.313049	3135
## [2786]	{mi,nj,oh,pa}	=> {ny}	0.09013542	0.9883354	5.954494	3135
## [2787]	{mi,nj,ny,oh}	=> {pa}	0.09013542	0.9861592	6.265912	3135
## [2788]	{mi,nj,ny,pa}	=> {oh}	0.09013542	0.9420072	6.865874	3135
## [2789]	{nj,ny,oh,pa}	=> {mi}	0.09013542	0.8980235	6.597836	3135
## [2790]	{mi,ny,oh,pa}	=> {nj}	0.09013542	0.9193548	6.631290	3135
## [2791]	{md,mo}	=> {va}	0.09010667	0.9543240	5.887255	3134
## [2792]	{mo,va}	=> {md}	0.09010667	0.8926232	6.077981	3134
## [2793]	{ct,nc}	=> {pa}	0.09010667	0.9607603	6.104531	3134
## [2794]	{ct,pa}	=> {nc}	0.09010667	0.7954315	4.668563	3134

```
## [2795] {nc,pa}      => {ct} 0.09010667 0.7936186 6.286233 3134
## [2796] {in,oh}      => {nc} 0.09010667 0.8025608 4.710406 3134
## [2797] {in,nc}      => {oh} 0.09010667 0.9324606 6.796293 3134
## [2798] {nc,oh}      => {in} 0.09010667 0.8828169 6.915598 3134
## [2799] {nj,tn,va}    => {pa} 0.09010667 0.9534530 6.058102 3134
## [2800] {nj,pa,tn}    => {va} 0.09010667 0.9751089 6.015478 3134
## [2801] {pa,tn,va}    => {nj} 0.09010667 0.8913538 6.429319 3134
## [2802] {nj,pa,va}    => {tn} 0.09010667 0.8431531 5.984838 3134
## [2803] {in,wi}      => {oh} 0.09007792 0.9346659 6.812367 3133
## [2804] {oh,wi}      => {in} 0.09007792 0.9083792 7.115842 3133
## [2805] {in,oh}      => {wi} 0.09007792 0.8023047 6.457987 3133
## [2806] {de,md,nj}    => {va} 0.09007792 0.9763166 6.022928 3133
## [2807] {de,nj,va}    => {md} 0.09007792 0.9790625 6.666557 3133
## [2808] {de,md,va}    => {nj} 0.09007792 0.9473843 6.833466 3133
## [2809] {md,nj,va}    => {de} 0.09007792 0.8323592 7.975285 3133
## [2810] {md,va,wv}    => {ny} 0.09007792 0.8989957 5.416243 3133
## [2811] {md,ny,wv}    => {va} 0.09007792 0.9678715 5.970830 3133
## [2812] {ny,va,wv}    => {md} 0.09007792 0.9548918 6.501976 3133
## [2813] {md,ny,va}    => {wv} 0.09007792 0.8444744 7.230838 3133
## [2814] {ct,ma,nj,oh} => {pa} 0.09007792 0.9898894 6.289613 3133
## [2815] {ct,ma,nj,pa} => {oh} 0.09007792 0.9110206 6.640027 3133
## [2816] {ct,nj,oh,pa} => {ma} 0.09007792 0.9675726 6.780806 3133
## [2817] {ct,ma,oh,pa} => {nj} 0.09007792 0.9470979 6.831401 3133
## [2818] {ma,nj,oh,pa} => {ct} 0.09007792 0.9575183 7.584479 3133
## [2819] {ct,ma,nh}    => {ny} 0.09004916 0.9898862 5.963837 3132
## [2820] {ct,nh,ny}    => {ma} 0.09004916 0.9901992 6.939375 3132
## [2821] {ma,nh,ny}    => {ct} 0.09004916 0.9604416 7.607633 3132
## [2822] {ct,ma,ny}    => {nh} 0.09004916 0.8074246 7.725732 3132
## [2823] {md,nc,oh,va} => {pa} 0.09004916 0.9714640 6.172541 3132
## [2824] {md,nc,oh,pa} => {va} 0.09004916 0.9836683 6.068281 3132
## [2825] {md,oh,pa,va} => {nc} 0.09004916 0.9131195 5.359300 3132
## [2826] {nc,oh,pa,va} => {md} 0.09004916 0.9616211 6.547796 3132
## [2827] {md,nc,pa,va} => {oh} 0.09004916 0.8867497 6.463127 3132
## [2828] {in,ma}      => {il} 0.09002041 0.9528302 6.413855 3131
## [2829] {il,in}      => {ma} 0.09002041 0.7573778 5.307749 3131
## [2830] {il,ma}      => {in} 0.09002041 0.8804837 6.897321 3131
## [2831] {ct,mi,oh}    => {pa} 0.09002041 0.9796621 6.224630 3131
## [2832] {ct,mi,pa}    => {oh} 0.09002041 0.9357442 6.820226 3131
## [2833] {ct,oh,pa}    => {mi} 0.09002041 0.9059606 6.656151 3131
## [2834] {mi,oh,pa}    => {ct} 0.09002041 0.8894886 7.045617 3131
```

```
plantrules_df<-as(plantrules, "data.frame")
plants_k<-kmeans(plantrules_df[,2:4],2)
summary(plants_k$cluster) #clusters succuessfully classified
```

```
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##      1.000   1.000   2.000   1.541   2.000   2.000
```

```
table(plants_k$cluster)
```

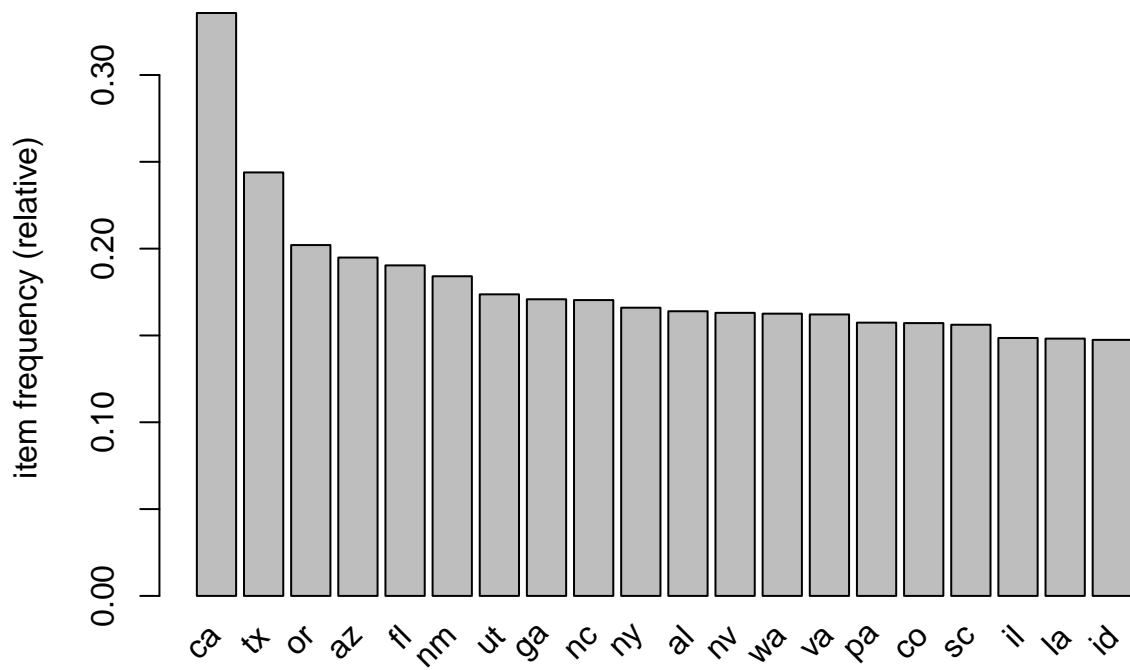
```
##
##      1      2
## 1300 1534
```

```
plantrules_df$cluster<-plants_k$cluster #Add clusters to the original dataframe conveniently in the sam
plantrules_df$rownum<-1:nrow(plantrules_df) #Add rownumbers for future labeling/graph usage
```

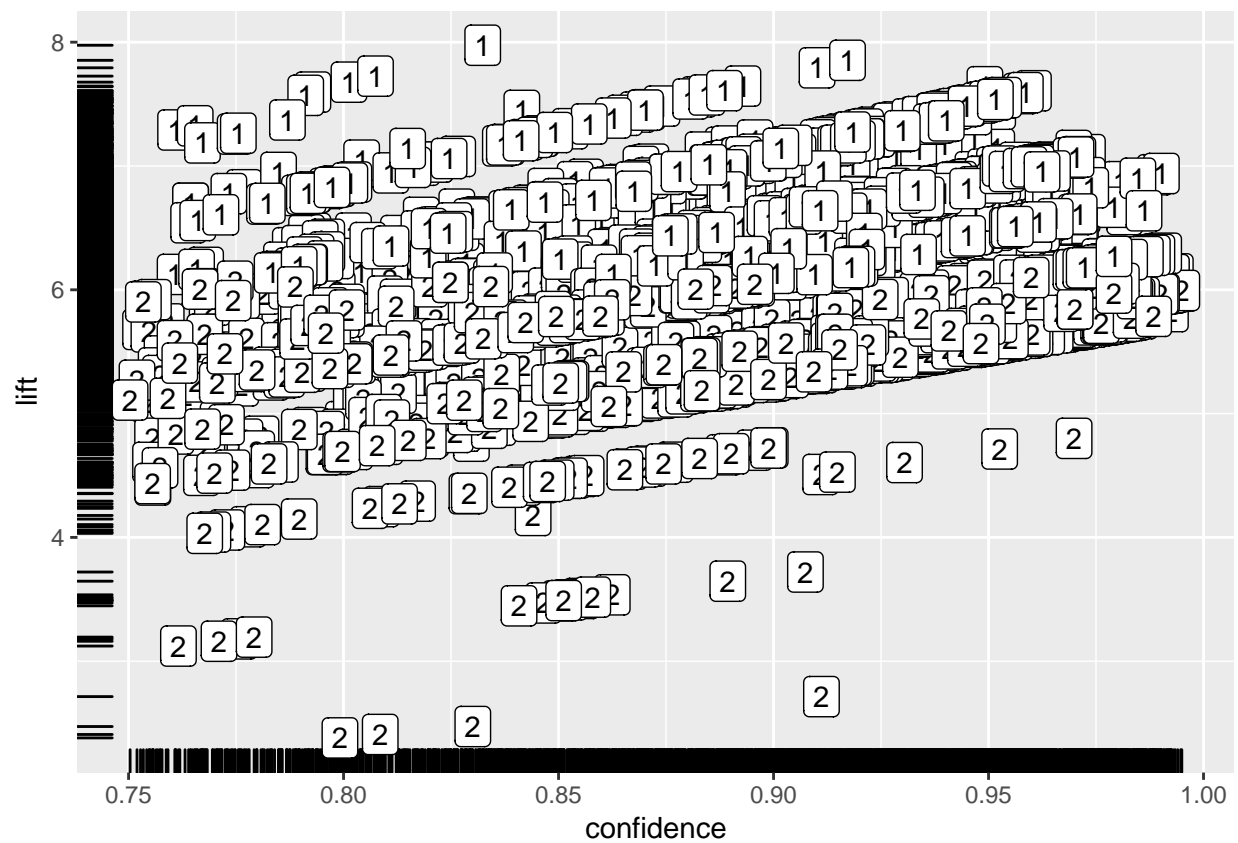
```
library(ggplot2)
```

```
## Warning: package 'ggplot2' was built under R version 3.4.4
```

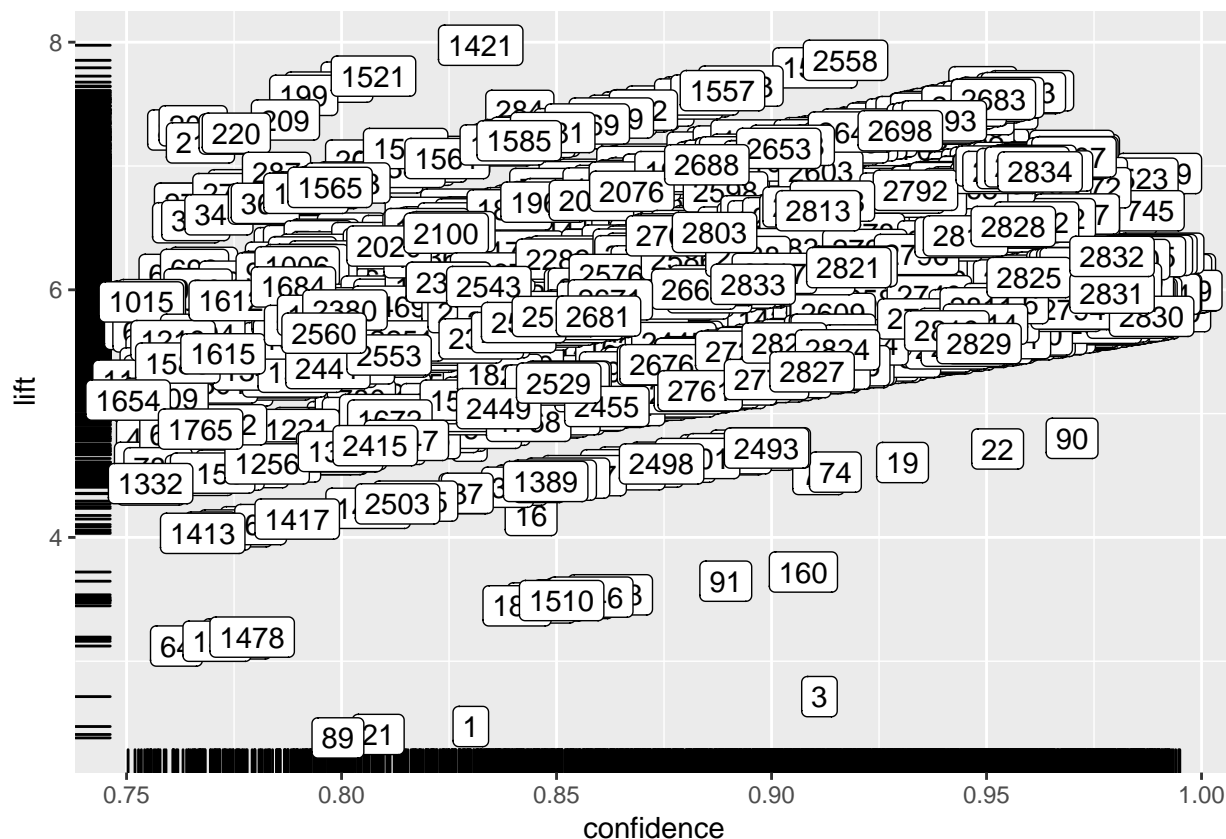
```
itemFrequencyPlot(plant, topN=20) #Notes the top 20 categories
```



```
ggplot(planrules_df, aes(x=confidence, y=lift)) +  
  geom_point() + geom_rug() + geom_label(label = planrules_df$cluster)
```



```
ggplot(planrules_df, aes(x=confidence, y=lift)) +  
  geom_point() + geom_rug() + geom_label(label = planrules_df$rownum) #checking row numbers of lift an
```



```
plantrules_df[1421,] #checking row clearly in cluster 1
```

```
##           rules      support confidence    lift count cluster
## 1421 {md,nj,va} => {de} 0.09007792  0.8323592 7.975285  3133      1
##      rownum
## 1421    1421
```

```
plantrules_df[91,] #checking row clearly in cluster 2
```

```
##           rules      support confidence    lift count cluster rownum
## 91 {ar,ok} => {tx} 0.09105546  0.8893569 3.646437  3167      2     91
```

```
#kmeans found it best to simply cluster according to lift above everything
```

```
#Noted that those in cluster 2 had the top 20 categorical variables that actually appear (in the rhs set)
```

```
#This means clusters that had categories are in the top 20 that at least had a minimum of 3 categories
```

```
#compared to more "rarer" states. Popular states that have more plants in general but had very few variables
```