semmcci: Internal Tests

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Tests

```
#> test-semmcci-mc-latent-med-defined-none
#> Test passed
#> Test passed
#> Test passed

#> test-semmcci-mc-latent-med-defined

#> Test passed
#> Test passed
#> Test passed

#> test-semmcci-mc-latent-med-std-defined-none

#> Test passed
#> Test passed
#> Test passed

#> test-semmcci-mc-latent-med-std-defined

#> Test passed
#> Test passed
#> Test passed

#> test-semmcci-mc-moment

#> Test passed

#> test-semmcci-mc-simple-med-defined-equality

#> Test passed
#> Test passed
#> Test passed

#> test-semmcci-mc-simple-med-defined-inequality

#> Test passed
#> Test passed
#> Test passed
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#> test-semmcci-mc-simple-med-defined-meanstructure

#> Test passed
#> Test passed
#> Test passed

#> test-semmcci-mc-simple-med-defined-mi-amelia

#> Test passed

#> test-semmcci-mc-simple-med-defined-mi-list

#> Test passed

#> test-semmcci-mc-simple-med-defined-mi-mice

#> Test passed

#> test-semmcci-mc-simple-med-defined-none

#> Test passed
#> Test passed
#> Test passed

#> test-semmcci-mc-simple-med-defined

#> Test passed
#> Test passed
#> Test passed

#> test-semmcci-mc-simple-med-std-defined-meanstructure

#> Test passed
#> Test passed
#> Test passed

#> test-semmcci-mc-simple-med-std-defined-none-random-x

#> Test passed
#> Test passed
#> Test passed

#> test-semmcci-mc-simple-med-std-defined-none

#> Test passed
#> Test passed
#> Test passed

#> test-semmcci-mc-simple-med-std-defined

#> Test passed
#> Test passed
#> Test passed
```

```
#> test-semmcci-mc-methods

#> Monte Carlo Confidence Intervals
#>                     est     se   R  0.05%   0.5%   2.5%  97.5%  99.5% 99.95%
#> visual=~x1       1.0000 0.0000 100 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000
#> visual=~x2       0.5535 0.0927 100 0.3360 0.3490 0.3809 0.7044 0.8322 0.8840
#> visual=~x3       0.7294 0.1129 100 0.4848 0.4983 0.5228 0.9200 1.0139 1.0613
#> textual=~x4      1.0000 0.0000 100 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000
#> textual=~x5      1.1131 0.0635 100 0.9562 0.9580 1.0040 1.2516 1.2788 1.2791
#> textual=~x6      0.9261 0.0554 100 0.7819 0.7949 0.8330 1.0317 1.0811 1.0975
#> speed=~x7        1.0000 0.0000 100 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000
#> speed=~x8        1.1800 0.1613 100 0.8739 0.8847 0.9540 1.5231 1.6478 1.6685
#> speed=~x9        1.0815 0.1382 100 0.7222 0.7260 0.7607 1.3234 1.4176 1.4252
#> x1~~x1           0.5491 0.1253 100 0.1691 0.2441 0.3420 0.8359 0.8968 0.9090
#> x2~~x2           1.1338 0.1059 100 0.8490 0.8631 0.9327 1.3688 1.4066 1.4143
#> x3~~x3           0.8443 0.0979 100 0.5295 0.5786 0.6576 0.9956 1.0434 1.0501
#> x4~~x4           0.3712 0.0457 100 0.2766 0.2807 0.2938 0.4679 0.4756 0.4770
#> x5~~x5           0.4463 0.0571 100 0.3246 0.3333 0.3509 0.5464 0.6315 0.6723
#> x6~~x6           0.3562 0.0510 100 0.2252 0.2339 0.2600 0.4539 0.4734 0.4842
#> x7~~x7           0.7994 0.0838 100 0.6039 0.6061 0.6449 0.9563 1.0113 1.0454
#> x8~~x8           0.4877 0.0652 100 0.3253 0.3358 0.3617 0.6319 0.6554 0.6706
#> x9~~x9           0.5661 0.0708 100 0.3471 0.3586 0.4228 0.6863 0.6997 0.7033
#> visual~~visual   0.8093 0.1703 100 0.3430 0.4038 0.5140 1.1192 1.2246 1.2695
#> textual~~textual 0.9795 0.1112 100 0.7087 0.7246 0.7715 1.2028 1.2263 1.2338
#> speed~~speed     0.3837 0.0788 100 0.1844 0.1849 0.1996 0.5295 0.5551 0.5701
#> visual~~textual  0.4082 0.0716 100 0.2381 0.2483 0.2704 0.5295 0.5379 0.5393
#> visual~~speed    0.2622 0.0587 100 0.1088 0.1107 0.1456 0.3633 0.3783 0.3837
#> textual~~speed   0.1735 0.0460 100 0.0377 0.0532 0.0776 0.2482 0.2691 0.2814
#> Monte Carlo Confidence Intervals (Multiple Imputation Estimates)
#>                     est     se   R  0.05%   0.5%   2.5%  97.5%  99.5% 99.95%
#> visual=~x1       1.0000 0.0000 100 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000
#> visual=~x2       0.5535 0.1020 100 0.3731 0.3758 0.4150 0.7524 0.9019 0.9927
#> visual=~x3       0.7294 0.1091 100 0.3915 0.4521 0.5555 0.9326 0.9875 1.0185
#> textual=~x4      1.0000 0.0000 100 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000
#> textual=~x5      1.1131 0.0617 100 0.9842 0.9894 1.0000 1.2319 1.2673 1.2708
#> textual=~x6      0.9261 0.0565 100 0.7888 0.8016 0.8232 1.0152 1.0343 1.0373
#> speed=~x7        1.0000 0.0000 100 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000
#> speed=~x8        1.1800 0.1403 100 0.8819 0.8938 0.9261 1.4230 1.5250 1.5321
#> speed=~x9        1.0815 0.1550 100 0.6615 0.6809 0.7588 1.3537 1.3912 1.4135
#> x1~~x1           0.5491 0.1203 100 0.2776 0.2840 0.3370 0.7749 0.8503 0.8594
#> x2~~x2           1.1338 0.1052 100 0.8935 0.8977 0.9270 1.3066 1.3705 1.3788
#> x3~~x3           0.8443 0.0911 100 0.6594 0.6631 0.6833 1.0184 1.0432 1.0531
#> x4~~x4           0.3712 0.0473 100 0.2389 0.2636 0.2998 0.4658 0.4969 0.5003
#> x5~~x5           0.4463 0.0607 100 0.3315 0.3400 0.3518 0.5618 0.5836 0.6012
#> x6~~x6           0.3562 0.0393 100 0.2617 0.2676 0.2791 0.4359 0.4409 0.4434
#> x7~~x7           0.7994 0.0790 100 0.6418 0.6423 0.6601 0.9534 0.9690 0.9695
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#> x8~~x8          0.4877 0.0695 100 0.2878 0.2939 0.3285 0.6148 0.6486 0.6525
#> x9~~x9          0.5661 0.0720 100 0.4206 0.4213 0.4447 0.7315 0.7546 0.7614
#> visual~~visual  0.8093 0.1417 100 0.4397 0.4422 0.4821 1.0127 1.0282 1.0303
#> textual~~textual 0.9795 0.1060 100 0.7375 0.7453 0.7903 1.1707 1.2470 1.2742
#> speed~~speed    0.3837 0.0768 100 0.2216 0.2267 0.2360 0.5286 0.5423 0.5465
#> visual~~textual 0.4082 0.0792 100 0.2022 0.2159 0.2421 0.5251 0.6146 0.6286
#> visual~~speed   0.2622 0.0476 100 0.1683 0.1713 0.1822 0.3524 0.3860 0.3985
#> textual~~speed  0.1735 0.0514 100 0.0527 0.0580 0.0690 0.2644 0.2725 0.2727
#> Standardized Monte Carlo Confidence Intervals
#>                    est     se   R  0.05%   0.5%   2.5%  97.5%  99.5% 99.95%
#> visual=~x1      0.7719 0.0666 100 0.5229 0.5550 0.6359 0.8610 0.9123 0.9393
#> visual=~x2      0.4236 0.0536 100 0.2906 0.2994 0.3193 0.5382 0.5567 0.5666
#> visual=~x3      0.5811 0.0571 100 0.4595 0.4662 0.4806 0.6873 0.6949 0.6966
#> textual=~x4     0.8516 0.0229 100 0.7970 0.7979 0.8073 0.8867 0.8961 0.8962
#> textual=~x5     0.8551 0.0218 100 0.7662 0.7848 0.8097 0.8894 0.8997 0.9026
#> textual=~x6     0.8380 0.0258 100 0.7611 0.7715 0.7845 0.8871 0.8968 0.8989
#> speed=~x7       0.5695 0.0536 100 0.3891 0.4018 0.4375 0.6496 0.6790 0.6874
#> speed=~x8       0.7230 0.0491 100 0.5812 0.5833 0.6008 0.8007 0.8082 0.8107
#> speed=~x9       0.6650 0.0508 100 0.5205 0.5322 0.5666 0.7453 0.7829 0.8103
#> x1~~x1          0.4042 0.0995 100 0.1175 0.1667 0.2586 0.5956 0.6907 0.7263
#> x2~~x2          0.8206 0.0452 100 0.6790 0.6899 0.7103 0.8980 0.9103 0.9155
#> x3~~x3          0.6623 0.0663 100 0.5147 0.5170 0.5276 0.7690 0.7826 0.7889
#> x4~~x4          0.2748 0.0388 100 0.1968 0.1970 0.2138 0.3483 0.3634 0.3647
#> x5~~x5          0.2689 0.0368 100 0.1853 0.1906 0.2090 0.3444 0.3837 0.4129
#> x6~~x6          0.2977 0.0431 100 0.1920 0.1957 0.2131 0.3845 0.4046 0.4207
#> x7~~x7          0.6757 0.0588 100 0.5274 0.5388 0.5780 0.8086 0.8384 0.8486
#> x8~~x8          0.4772 0.0689 100 0.3427 0.3467 0.3588 0.6390 0.6598 0.6623
#> x9~~x9          0.5578 0.0668 100 0.3433 0.3862 0.4445 0.6789 0.7166 0.7290
#> visual~~visual  1.0000 0.0000 100 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000
#> textual~~textual 1.0000 0.0000 100 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000
#> speed~~speed    1.0000 0.0000 100 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000
#> visual~~textual 0.4585 0.0660 100 0.2952 0.2996 0.3273 0.5808 0.6246 0.6270
#> visual~~speed   0.4705 0.0896 100 0.2438 0.2554 0.2865 0.6412 0.7267 0.7371
#> textual~~speed  0.2830 0.0755 100 0.0792 0.1071 0.1432 0.4335 0.4833 0.5180
#> Standardized Monte Carlo Confidence Intervals
#>                    est     se   R  0.05%   0.5%   2.5%  97.5%  99.5% 99.95%
#> visual=~x1      0.7719 0.0598 100 0.6044 0.6103 0.6184 0.8601 0.8786 0.8805
#> visual=~x2      0.4236 0.0595 100 0.2998 0.3029 0.3169 0.5442 0.5636 0.5727
#> visual=~x3      0.5811 0.0600 100 0.3528 0.3890 0.4714 0.6773 0.7051 0.7103
#> textual=~x4     0.8516 0.0233 100 0.7860 0.7903 0.8000 0.8849 0.8990 0.9037
#> textual=~x5     0.8551 0.0214 100 0.7774 0.7904 0.8127 0.8895 0.8912 0.8913
#> textual=~x6     0.8380 0.0232 100 0.7819 0.7821 0.7894 0.8803 0.8885 0.8891
#> speed=~x7       0.5695 0.0499 100 0.4388 0.4416 0.4685 0.6570 0.6674 0.6710
#> speed=~x8       0.7230 0.0442 100 0.6180 0.6265 0.6430 0.8093 0.8431 0.8596
#> speed=~x9       0.6650 0.0556 100 0.5115 0.5131 0.5305 0.7559 0.7619 0.7623
#> x1~~x1          0.4042 0.0891 100 0.2248 0.2281 0.2603 0.6176 0.6275 0.6347
```

```
#> x2~~x2           0.8206 0.0514 100 0.6720 0.6822 0.7038 0.8996 0.9082 0.9101
#> x3~~x3           0.6623 0.0677 100 0.4955 0.5028 0.5413 0.7775 0.8470 0.8752
#> x4~~x4           0.2748 0.0394 100 0.1834 0.1918 0.2169 0.3600 0.3754 0.3822
#> x5~~x5           0.2689 0.0363 100 0.2055 0.2058 0.2087 0.3396 0.3750 0.3956
#> x6~~x6           0.2977 0.0388 100 0.2095 0.2106 0.2251 0.3768 0.3883 0.3887
#> x7~~x7           0.6757 0.0560 100 0.5497 0.5546 0.5684 0.7805 0.8050 0.8074
#> x8~~x8           0.4772 0.0644 100 0.2611 0.2888 0.3449 0.5865 0.6074 0.6181
#> x9~~x9           0.5578 0.0719 100 0.4189 0.4196 0.4286 0.7185 0.7367 0.7384
#> visual~~visual   1.0000 0.0000 100 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000
#> textual~~textual 1.0000 0.0000 100 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000
#> speed~~speed     1.0000 0.0000 100 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000
#> visual~~textual  0.4585 0.0719 100 0.2726 0.2740 0.3141 0.6043 0.6367 0.6534
#> visual~~speed    0.4705 0.0723 100 0.3402 0.3513 0.3643 0.6527 0.6810 0.6870
#> textual~~speed   0.2830 0.0750 100 0.0974 0.1017 0.1280 0.4053 0.4541 0.4827
#> Monte Carlo Confidence Intervals
#> Monte Carlo Confidence Intervals (Multiple Imputation Estimates)
#> Standardized Monte Carlo Confidence Intervals
#> Standardized Monte Carlo Confidence Intervals

#> test-semmcci-npd

#> Test passed
#> Test passed
#> Test passed
#> Test passed

#> test-semmcci-zzz-coverage
#> test-semmcci-zzz-heywood

#> lavaan 0.6.15 ended normally after 18 iterations
#>
#>   Estimator                                         ML
#>   Optimization method                           NLMINB
#>   Number of model parameters                         8
#>
#>   Number of observations                            50
#>
#> Model Test User Model:
#>
#>   Test statistic                                 0.000
#>   Degrees of freedom                                 2
#>   P-value (Chi-square)                           1.000
#>
#> Parameter Estimates:
#>
#>   Standard errors                             Standard
#>   Information                                 Expected
```

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```
#>    Information saturated (h1) model         Structured
#>
#> Latent Variables:
#>                     Estimate  Std.Err  z-value  P(>|z|)
#>   eta1 =~
#>     y1                1.000
#>     y2                0.991    0.152    6.524    0.000
#>     y3                0.901    0.138    6.537    0.000
#>     y4                1.399    0.143    9.814    0.000
#>
#> Variances:
#>                     Estimate  Std.Err  z-value  P(>|z|)
#>    .y1                0.000    0.055    0.000    1.000
#>    .y2                0.980    0.203    4.822    0.000
#>    .y3                0.807    0.167    4.820    0.000
#>    .y4                0.696    0.176    3.960    0.000
#>     eta1              0.980    0.204    4.815    0.000
#>
#> Standardized Monte Carlo Confidence Intervals
#>               est se R 0.05% 0.5% 2.5% 97.5% 99.5% 99.95%
#> eta1=~y1   1.0000 NA 0    NA   NA   NA    NA    NA     NA
#> eta1=~y2   0.7039 NA 0    NA   NA   NA    NA    NA     NA
#> eta1=~y3   0.7047 NA 0    NA   NA   NA    NA    NA     NA
#> eta1=~y4   0.8566 NA 0    NA   NA   NA    NA    NA     NA
#> y1~~y1     0.0000 NA 0    NA   NA   NA    NA    NA     NA
#> y2~~y2     0.5045 NA 0    NA   NA   NA    NA    NA     NA
#> y3~~y3     0.5034 NA 0    NA   NA   NA    NA    NA     NA
#> y4~~y4     0.2662 NA 0    NA   NA   NA    NA    NA     NA
#> eta1~~eta1 1.0000 NA 0    NA   NA   NA    NA    NA     NA
#> [[1]]
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#> [[1]][[1]]$value
#> [[1]][[1]]$value[[1]]
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#>
#>
#> [[1]][[1]]$visible
#> [1] TRUE
#>
#>
#> [[1]][[2]]
#> [[1]][[2]]$value
#> [[1]][[2]]$value[[1]]
#> [1] TRUE
#>
```

```
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#> 
#> [[1]][[3]]$visible
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#> 
#> [[1]][[4]]
#> [[1]][[4]]$value
#> [[1]][[4]]$value[[1]]
#> [1] TRUE
#> 
#> 
#> [[1]][[4]]$visible
#> [1] TRUE
#> 
#> 
#> [[1]][[5]]
#> [[1]][[5]]$value
#> [[1]][[5]]$value[[1]]
#> Monte Carlo Confidence Intervals
#>                                est       se      R     0.05%      0.5%      2.5%
#> ses=~education              1.0000   0.0000  20000    1.0000    1.0000    1.0000
#> ses=~sei                    5.2195   0.4204  20000    3.7905    4.1486    4.4044
#> alien67=~anomia67           1.0000   0.0000  20000    1.0000    1.0000    1.0000
#> alien67=~powerless67        0.9787   0.0616  20000    0.7749    0.8156    0.8576
#> alien71=~anomia71           1.0000   0.0000  20000    1.0000    1.0000    1.0000
#> alien71=~powerless71        0.9221   0.0598  20000    0.7285    0.7676    0.8052
#> alien71~alien67             0.6070   0.0516  20000    0.4300    0.4731    0.5060
#> alien71~ses                -0.2268   0.0526  20000   -0.4006   -0.3604   -0.3308
#> alien67~ses                -0.5750   0.0560  20000   -0.7568   -0.7157   -0.6850
#> anomia67~~anomia71          1.6229   0.3098  20000    0.6296    0.8226    1.0191
#> powerless67~~powerless71    0.3387   0.2587  20000   -0.5051   -0.3230   -0.1767
#> education~~education        2.8013   0.5041  20000    1.1708    1.5050    1.7969
#> sei~~sei                  264.5971  18.0674  20000  205.8383  218.1587  229.0738
#> anomia67~~anomia67          4.7307   0.4566  20000    3.2021    3.5448    3.8392
#> powerless67~~powerless67    2.5634   0.4038  20000    1.2298    1.5215    1.7660
#> anomia71~~anomia71          4.3992   0.5131  20000    2.7750    3.0749    3.4000
```

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```
#> powerless71~~powerless71      3.0699  0.4312 20000     1.6196    1.9389    2.2248
#> ses~~ses                      6.7983  0.6423 20000     4.7779    5.1490    5.5319
#> alien67~~alien67              4.8415  0.4677 20000     3.3410    3.6690    3.9467
#> alien71~~alien71              4.0832  0.4077 20000     2.6840    3.0323    3.2800
#>                                97.5%    99.5%   99.95%
#> ses=~education                1.0000   1.0000   1.0000
#> ses=~sei                      6.0420   6.3088   6.5779
#> alien67=~anomia67             1.0000   1.0000   1.0000
#> alien67=~powerless67          1.0998   1.1363   1.1769
#> alien71=~anomia71             1.0000   1.0000   1.0000
#> alien71=~powerless71          1.0386   1.0762   1.1173
#> alien71~alien67               0.7090   0.7392   0.7747
#> alien71~ses                  -0.1239  -0.0914  -0.0518
#> alien67~ses                  -0.4649  -0.4312  -0.3940
#> anomia67~~anomia71            2.2269   2.4250   2.6340
#> powerless67~~powerless71      0.8439   1.0020   1.2089
#> education~~education          3.7795   4.0837   4.4228
#> sei~~sei                    300.3555 310.6938 320.8157
#> anomia67~~anomia67            5.6243   5.8976   6.2202
#> powerless67~~powerless67      3.3626   3.6137   3.8627
#> anomia71~~anomia71            5.3996   5.7175   6.1061
#> powerless71~~powerless71      3.9001   4.1667   4.5088
#> ses~~ses                      8.0491   8.4629   8.8994
#> alien67~~alien67              5.7554   6.0484   6.3486
#> alien71~~alien71              4.8815   5.1413   5.4596
#>
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#> [[1]][[5]]$visible
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#>
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#>
```

```
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#>
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#>
#> [[1]][[8]]$visible
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#>
#> [[1]][[9]]
#> [[1]][[9]]$value
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#>
#>
#> [[1]][[9]]$visible
#> [1] TRUE
#>
#>
#> [[1]][[10]]
#> [[1]][[10]]$value
#> [[1]][[10]]$value[[1]]
#> [1] TRUE
#>
#>
#> [[1]][[10]]$visible
#> [1] TRUE
#>
#>
#> [[1]][[11]]
#> [[1]][[11]]$value
#> [[1]][[11]]$value[[1]]
#> [1] TRUE
#>
#>
#> [[1]][[11]]$visible
#> [1] TRUE
#>
#>
#> [[1]][[12]]
```

```
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#>
#>
#> [[1]][[12]]$visible
#> [1] TRUE
#>
#>
#> [[1]][[13]]
#> [[1]][[13]]$value
#> [[1]][[13]]$value[[1]]
#> [1] TRUE
#>
#>
#> [[1]][[13]]$visible
#> [1] TRUE
#>
#>
#> [[1]][[14]]
#> [[1]][[14]]$value
#> [[1]][[14]]$value[[1]]
#> [1] TRUE
#>
#>
#> [[1]][[14]]$visible
#> [1] TRUE
#>
#>
#> [[1]][[15]]
#> [[1]][[15]]$value
#> [[1]][[15]]$value[[1]]
#> [1] TRUE
#>
#>
#> [[1]][[15]]$visible
#> [1] TRUE
#>
#>
#> [[1]][[16]]
#> [[1]][[16]]$value
#> [[1]][[16]]$value[[1]]
#> [1] TRUE
#>
#>
```

```
#> [[1]][[16]]$visible
#> [1] TRUE
#>
#>
#> [[1]][[17]]
#> [[1]][[17]]$value
#> [[1]][[17]]$value[[1]]
#> [1] TRUE
#>
#>
#> [[1]][[17]]$visible
#> [1] TRUE
#>
#>
#> [[1]][[18]]
#> [[1]][[18]]$value
#> [[1]][[18]]$value[[1]]
#>                     2.5 %     97.5 %
#> visual=~x1        0.6183540 0.8600535
#> visual=~x2        0.3169201 0.5442326
#> visual=~x3        0.4714329 0.6772663
#> textual=~x4       0.7999907 0.8849018
#> textual=~x5       0.8126775 0.8895276
#> textual=~x6       0.7894024 0.8802954
#> speed=~x7         0.4684685 0.6569525
#> speed=~x8         0.6430046 0.8093467
#> speed=~x9         0.5304941 0.7559292
#> x1~~x1            0.2603073 0.6176382
#> x2~~x2            0.7038106 0.8995537
#> x3~~x3            0.5412936 0.7775260
#> x4~~x4            0.2169487 0.3600144
#> x5~~x5            0.2087397 0.3395535
#> x6~~x6            0.2250792 0.3768366
#> x7~~x7            0.5684124 0.7804915
#> x8~~x8            0.3448565 0.5865377
#> x9~~x9            0.4285501 0.7184771
#> visual~~visual    1.0000000 1.0000000
#> textual~~textual  1.0000000 1.0000000
#> speed~~speed      1.0000000 1.0000000
#> visual~~textual   0.3140916 0.6043055
#> visual~~speed     0.3642500 0.6527100
#> textual~~speed    0.1279785 0.4052932
#>
#>
#> [[1]][[18]]$visible
```

11

```
#> [1] TRUE
#>
#>
#> [[1]][[19]]
#> [[1]][[19]]$value
#> [[1]][[19]]$value[[1]]
#> [[1]][[19]]$value[[1]]$thetahatstar
#>                   y1              y2              y3
#>    [1,] -0.9170445236 -0.6343422117 -1.495569e+00
#>    [2,]  1.6336242028  4.5576070537  4.566377e+00
#>    [3,] -1.8543098868 -3.1927904614 -4.084152e+00
#>    [4,]  3.4411268113  5.1174963410  7.131011e+00
#>    [5,] -0.0039583076  0.0052173114 -2.040539e-03
#>    [6,]  1.3966936796  2.4380567428  3.094668e+00
#>    [7,] -1.3366297038 -1.7559332366 -2.641219e+00
#>    [8,] -2.2168292215 -5.1356804121 -5.614428e+00
#>    [9,] -1.1304769213 -2.8315648236 -2.981082e+00
#>   [10,]  0.6046536097  0.8134935078  1.205446e+00
#>   [11,] -2.3017198240 -4.6563137089 -5.454257e+00
#>   [12,] -0.3443328399 -0.0203321447 -4.406595e-01
#>   [13,]  1.7531306084  4.1013631065  4.462203e+00
#>   [14,] -1.0135481487 -1.8388318669 -2.284349e+00
#>   [15,]  0.2927029354 -0.7724309654 -6.367226e-02
#>   [16,] -0.3007340151 -0.7373902438 -7.842299e-01
#>   [17,] -1.0194383861 -2.1549172919 -2.467108e+00
#>   [18,] -2.2791586117 -2.9734904547 -4.492227e+00
#>   [19,] -0.5365639292 -0.8561793807 -1.144228e+00
#>   [20,] -0.6099352879 -0.3370093118 -9.476029e-01
#>   [21,] -0.8535073680 -1.7072323833 -2.011749e+00
#>   [22,] -0.0251027728 -0.7558796352 -4.507842e-01
#>   [23,] -0.6682074691 -1.2235450098 -1.512257e+00
#>   [24,] -0.9065870670 -1.4590430067 -1.940203e+00
#>   [25,] -0.8085059699 -3.1565232556 -2.759929e+00
#>   [26,]  0.3906078960  0.6588571358  8.527182e-01
#>   [27,] -0.0741178606  0.2412600552  4.146577e-02
#>   [28,] -1.3236386535 -1.6460171437 -2.564021e+00
#>   [29,]  1.4839671015  3.2927788441  3.677831e+00
#>   [30,] -0.0177412550 -0.1951202267 -1.304065e-01
#>   [31,] -2.1289364429 -3.0662369617 -4.356373e+00
#>   [32,]  0.8125253121  1.4398047318  1.812234e+00
#>   [33,] -0.7385177307 -2.4725785129 -2.293094e+00
#>   [34,] -0.0170744937 -0.5324731024 -3.167918e-01
#>   [35,] -0.1690045561 -0.1941503823 -3.184906e-01
#>   [36,]  0.2774668391  2.1710565641  1.550841e+00
#>   [37,] -0.0906752635 -0.5594856494 -4.235613e-01
```

```
#>    [38,]  0.3843014582  1.8392607606  1.499929e+00
#>    [39,] -0.0489371564 -1.0402664366 -6.383280e-01
#>    [40,] -0.3987382404 -1.6196849851 -1.396076e+00
#>    [41,]  2.4057256400  4.1378025509  5.296198e+00
#>    [42,] -1.2602847994 -2.1172089102 -2.746512e+00
#>    [43,]  0.0595996047 -0.4471205900 -1.738137e-01
#>    [44,] -0.1362378089  0.9534614509  3.592454e-01
#>    [45,] -1.2028177260 -1.6397947169 -2.409907e+00
#>    [46,] -0.3968871117  0.3594203363 -2.954469e-01
#>    [47,]  1.5314473721  1.2417119172  2.598782e+00
#>    [48,]  0.4305610554  1.3638144305  1.293761e+00
#>    [49,] -0.6124578026 -0.5226569627 -1.053775e+00
#>    [50,]  0.7848338828  0.0921769497  1.029826e+00
#>    [51,] -0.9714886421 -1.1752564672 -1.863645e+00
#>    [52,]  2.1936556014  3.0003862988  4.400533e+00
#>    [53,]  0.3112412339  1.0737317808  9.839877e-01
#>    [54,]  0.4571412640  0.5420337336  8.708519e-01
#>    [55,]  0.4888488715  1.1399035604  1.242183e+00
#>    [56,] -1.8888386303 -2.7725824971 -3.894010e+00
#>    [57,]  0.4494354522  0.1996552823  6.712372e-01
#>    [58,] -0.8001895421 -2.5043322618 -2.387620e+00
#>    [59,]  1.5306625696  2.9803461295  3.562672e+00
#>    [60,] -0.1802711734  1.2222637983  4.535108e-01
#>    [61,]  0.0693690695  0.9749401726  6.275528e-01
#>    [62,] -1.8771265458 -4.3366144594 -4.747378e+00
#>    [63,]  0.1057150976  0.1768824643  2.299869e-01
#>    [64,] -1.2467502073 -2.5782836900 -2.985512e+00
#>    [65,]  0.4442845746  0.7833535654  9.887422e-01
#>    [66,] -0.4812075937 -0.8298770299 -1.060603e+00
#>    [67,] -0.4288638750 -0.8338183576 -9.975188e-01
#>    [68,] -1.3516534875 -2.4777518619 -3.060533e+00
#>    [69,]  1.3433331240  1.8664790096  2.710927e+00
#>    [70,] -1.1431640860 -2.8274666362 -2.994628e+00
#>    [71,] -0.3729937863  0.5152932824 -1.791494e-01
#>    [72,] -0.7678710403 -0.3489744585 -1.151186e+00
#>    [73,]  0.2730785110  1.0682337128  9.333483e-01
#>    [74,]  0.2019984582  0.5428432832  5.531433e-01
#>    [75,] -0.8991652550 -1.5724027632 -1.993858e+00
#>    [76,]  0.1821675447 -0.6534569609 -1.354820e-01
#>    [77,] -1.2133397603 -1.4537150060 -2.319761e+00
#>    [78,] -2.0244459349 -3.3638040091 -4.391213e+00
#>    [79,] -1.6491611383 -2.5031769891 -3.445629e+00
#>    [80,]  0.7472099459  0.3469539290  1.124300e+00
#>    [81,] -1.9516632676 -2.8223721158 -3.999983e+00
#>    [82,] -1.6158944909 -1.3185429090 -2.746724e+00
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#>    [83,] -0.2728715626  0.6650829482  2.882792e-02
#>    [84,]  0.3434036265 -1.6070528104 -4.636297e-01
#>    [85,]  0.0347588966 -0.0798747484 -9.835061e-04
#>    [86,] -0.7725846040 -1.4373528981 -1.761068e+00
#>    [87,] -1.7377741415 -2.8662124579 -3.757597e+00
#>    [88,] -0.5876700520 -0.1902334662 -8.383842e-01
#>    [89,]  0.5181798604  1.4417407086  1.446265e+00
#>    [90,] -0.4098488890 -1.4626282981 -1.322771e+00
#>    [91,]  0.6037008468  1.6579151420  1.672876e+00
#>    [92,]  0.1978126112  1.0287288131  8.175697e-01
#>    [93,] -1.5816102571 -2.1703612742 -3.176695e+00
#>    [94,] -1.7812644020 -2.6945360948 -3.716555e+00
#>    [95,]  0.9405143886  0.3200675078  1.350426e+00
#>    [96,] -0.5930538714 -1.8199824692 -1.749540e+00
#>    [97,] -0.1449670814 -0.5674214789 -4.956662e-01
#>    [98,] -0.5708410384 -0.9957714283 -1.264439e+00
#>    [99,] -1.4917323982 -2.2004033533 -3.081292e+00
#>   [100,]  0.5214792410  0.9531198517  1.179216e+00
#>   [101,]  1.5419793207  1.6785301275  2.854331e+00
#>   [102,] -1.7093593869 -2.4263687404 -3.478069e+00
#>   [103,] -0.6948026998 -1.3488079115 -1.614937e+00
#>   [104,]  0.6686601317  1.7607135180  1.810928e+00
#>   [105,]  0.3609709859  1.3107159364  1.177516e+00
#>   [106,] -0.1191225801 -1.6832020450 -1.082650e+00
#>   [107,]  1.4262542679  3.3989668799  3.664794e+00
#>   [108,]  0.5099278744  0.1322917175  7.092860e-01
#>   [109,]  1.1538684502  0.3104737707  1.611150e+00
#>   [110,]  0.9909067932  0.5108601067  1.519147e+00
#>   [111,]  0.1569088334 -0.3523862143  1.025197e-04
#>   [112,] -0.4978432725 -1.0528294639 -1.205077e+00
#>   [113,] -0.0602854448  1.0394087994  5.016536e-01
#>   [114,] -0.4011757646 -0.7489605914 -9.158998e-01
#>   [115,]  0.7548823317  1.2133287776  1.614670e+00
#>   [116,]  0.8832521454  1.9359249196  2.175755e+00
#>   [117,]  0.1552993495  0.3397493342  3.822018e-01
#>   [118,]  3.5642118095  4.1430120738  6.743698e+00
#>   [119,] -2.1504364816 -4.1545089998 -4.987129e+00
#>   [120,] -1.2594469456 -2.1793873872 -2.779973e+00
#>   [121,] -2.0874608365 -4.1965161328 -4.931912e+00
#>   [122,]  0.0489257617 -0.7974980625 -3.815686e-01
#>   [123,] -0.7995455583 -1.0404681052 -1.574433e+00
#>   [124,]  1.5044644700  3.0198559511  3.551930e+00
#>   [125,] -0.2634718471 -0.0507538895 -3.567103e-01
#>   [126,]  1.1268396535  1.8783772271  2.447567e+00
#>   [127,]  0.7699653182  0.9129251778  1.466766e+00
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#>  [128,]  0.5825881442  0.5166651544  1.013203e+00
#>  [129,] -0.3427767144 -0.0883084453 -4.764431e-01
#>  [130,] -1.0291562805 -1.5337351148 -2.134496e+00
#>  [131,] -3.0119188834 -6.2695168496 -7.235121e+00
#>  [132,]  0.8029548071  1.3376540846  1.743610e+00
#>  [133,] -0.2599895416 -1.3023083566 -1.046928e+00
#>  [134,]  1.2766701310  1.8545267136  2.621166e+00
#>  [135,] -0.7011702926 -0.7778128176 -1.305999e+00
#>  [136,]  2.2054002388  4.4684163852  5.229873e+00
#>  [137,] -0.4859322881 -0.4280679685 -8.435075e-01
#>  [138,]  0.2931607602  0.7399248152  7.761928e-01
#>  [139,]  0.6769829216  1.4242398658  1.634577e+00
#>  [140,] -2.7738309654 -4.1848000779 -5.781299e+00
#>  [141,] -0.5824974090 -1.0746789746 -1.322764e+00
#>  [142,] -2.2270264952 -3.5472886185 -4.745653e+00
#>  [143,] -1.5444597437 -1.5002347236 -2.758477e+00
#>  [144,]  1.2198511404  2.1777670063  2.729699e+00
#>  [145,] -1.1526098502 -1.6412790789 -2.348122e+00
#>  [146,] -2.1875513764 -3.5484911498 -4.697096e+00
#>  [147,] -0.9793766622 -1.2607070990 -1.920902e+00
#>  [148,]  0.4406797846  0.9901773004  1.099026e+00
#>  [149,]  1.7009042656  2.7837254882  3.665844e+00
#>  [150,]  1.1721371727  2.1531159409  2.656520e+00
#>  [151,]  0.5383604425  1.9487122735  1.752778e+00
#>  [152,] -0.7570715731 -0.9058538733 -1.446764e+00
#>  [153,] -1.6333867784 -4.1313380572 -4.329520e+00
#>  [154,]  1.9651739908  3.2834713352  4.272721e+00
#>  [155,]  1.1746260833  1.8049656062  2.466415e+00
#>  [156,] -0.0005326926 -0.1747111082 -9.762161e-02
#>  [157,] -0.9920532663  0.6319948817 -8.863395e-01
#>  [158,] -0.1710651564 -0.5673657137 -5.281790e-01
#>  [159,]  0.4398519356  1.1564661396  1.190277e+00
#>  [160,] -0.2282079363 -0.1828412239 -3.860399e-01
#>  [161,] -0.3378727747 -0.7632867014 -8.449126e-01
#>  [162,]  1.1850602724  2.3844516180  2.801017e+00
#>  [163,] -0.5717580214 -0.7214263739 -1.113332e+00
#>  [164,] -0.0132987998 -0.4543498681 -2.687285e-01
#>  [165,] -0.5187183080 -0.8896227933 -1.140535e+00
#>  [166,] -0.4269046389  0.7247680739 -1.301254e-01
#>  [167,]  0.0648670096  0.3008400485  2.478415e-01
#>  [168,]  1.1573477446  3.6561402525  3.472194e+00
#>  [169,]  0.8165300332  1.6003326258  1.906314e+00
#>  [170,] -0.1637869947 -0.0022176979 -2.054698e-01
#>  [171,] -1.5214879830 -2.8613467982 -3.485192e+00
#>  [172,] -0.3833142122 -0.7206508652 -8.779161e-01
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#>   [173,] -1.8212967904 -1.7406713432 -3.237120e+00
#>   [174,]  0.3147806010  1.0394182995  9.693586e-01
#>   [175,] -0.3239486019 -1.2543614709 -1.100075e+00
#>   [176,] -1.1916275842 -1.7506248265 -2.457459e+00
#>   [177,] -1.7655526247 -3.1567439707 -3.953469e+00
#>   [178,] -0.1300781811 -0.4758700395 -4.262928e-01
#>   [179,]  0.0473168382 -0.4933336291 -2.147764e-01
#>   [180,] -0.1796978237  1.0814920542  3.761033e-01
#>   [181,]  1.1030836506  2.5216874562  2.774954e+00
#>   [182,]  1.0392362205  3.1371937183  3.036918e+00
#>   [183,] -1.0762884437 -2.2537077989 -2.592823e+00
#>   [184,]  0.4445695789  0.5549121186  8.623222e-01
#>   [185,] -2.2817646285 -4.9797116950 -5.608845e+00
#>   [186,]  0.0151770938  0.7638384360  4.428239e-01
#>   [187,]  0.3289819400  0.4518930915  6.610155e-01
#>   [188,] -1.6691636658 -2.4369904019 -3.433841e+00
#>   [189,]  1.3066847668  1.2695114236  2.333935e+00
#>   [190,] -1.1738047074 -0.9317150133 -1.980773e+00
#>   [191,]  0.0997785738 -0.4989346632 -1.524660e-01
#>   [192,] -0.7816222832 -1.1117970392 -1.591668e+00
#>   [193,] -0.9056585875 -2.1914359261 -2.345493e+00
#>   [194,]  0.7227640926  1.8752489063  1.941957e+00
#>   [195,]  1.4467807709  2.4388683761  3.157576e+00
#>   [196,]  0.1453651696 -1.0999842998 -4.291778e-01
#>   [197,]  1.0944726544  3.2913055609  3.191322e+00
#>   [198,]  1.1595800782  1.0753166098  2.042728e+00
#>   [199,]  0.3819888376  0.6142913674  8.172383e-01
#>   [200,]  0.9798584309  2.4378647183  2.574776e+00
#>   [201,]  1.9665427900  3.4827952208  4.385044e+00
#>   [202,]  0.4119661552  1.2849425328  1.226803e+00
#>   [203,]  1.0429119797  2.1762227597  2.508202e+00
#>   [204,] -1.9439309991 -2.4701699862 -3.794883e+00
#>   [205,] -0.3389099868 -0.8211376767 -8.783109e-01
#>   [206,] -0.1991292435 -0.7326296170 -6.548889e-01
#>   [207,]  1.1164440043  1.2365562621  2.078420e+00
#>   [208,]  1.0954965136  2.0037263625  2.478046e+00
#>   [209,]  0.6103096872  0.6801647276  1.138507e+00
#>   [210,]  0.8831699592  3.6264323279  3.113813e+00
#>   [211,] -1.1343756282 -2.4962482778 -2.799857e+00
#>   [212,]  0.4968504314  1.6844922930  1.554385e+00
#>   [213,] -1.2342590875 -1.1045706974 -2.152086e+00
#>   [214,]  0.0853653438  0.7639675790  5.304189e-01
#>   [215,]  0.8030190010  0.9398725985  1.522938e+00
#>   [216,]  0.3956924525  0.3977567617  7.141588e-01
#>   [217,]  0.2819338016  0.4237678285  5.867391e-01
```

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#>   [218,] -0.2580870139 -0.7443391300 -7.349063e-01
#>   [219,] -1.4045103098 -1.9041954843 -2.808144e+00
#>   [220,]  0.5535710853  1.9133111917  1.752099e+00
#>   [221,] -0.3807189102 -0.5252648830 -7.662487e-01
#>   [222,] -2.0479398321 -4.0131203448 -4.780853e+00
#>   [223,]  0.2853940546  0.4055637459  5.809515e-01
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#>   [225,]  0.3548858525  0.5318236437  7.376753e-01
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#>   [227,] -2.1528523043 -2.8644125779 -4.274192e+00
#>   [228,] -0.4102883743 -0.9069934176 -1.014965e+00
#>   [229,]  0.2096656380 -0.9259947541 -2.524395e-01
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#>   [247,] -1.3373244910 -1.6128962358 -2.562706e+00
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#>   [472,]   1.4700954319   2.8835662218   3.433438e+00
#>   [473,]  -0.6429314721  -0.5761585272  -1.121466e+00
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#>   [476,]  -0.9125621246  -1.3091636764  -1.864477e+00
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#>   [485,]  -0.7198652370  -0.0672051141  -9.349533e-01
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#>   [495,] -1.7640203859 -2.9531121297 -3.838551e+00
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#>   [497,]  1.3897832115  2.3985937829  3.064150e+00
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#>  [710,] -0.0093084787  -0.2969287294  -1.763905e-01
#>  [711,] -0.1947249679  -0.4639747608  -5.003046e-01
#>  [712,] -0.1011909627   0.7361935371   2.823735e-01
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#>   [713,]   1.1661185327   2.0351562394   2.583553e+00
#>   [714,]  -0.8395209941  -2.5026744341  -2.435745e+00
#>   [715,]  -0.1217968188   0.6214161049   1.929818e-01
#>   [716,]  -1.3495733701  -2.6578969530  -3.157912e+00
#>   [717,]  -1.2316147052  -1.6213960562  -2.435605e+00
#>   [718,]   0.1074880575   0.1929777731   2.411300e-01
#>   [719,]   0.0798257398   0.3723533392   3.061816e-01
#>   [720,]  -1.2077311224  -1.5692441455  -2.376881e+00
#>   [721,]   1.2481475227   2.4160795528   2.897237e+00
#>   [722,]  -0.4219939064  -0.6590517029  -8.919639e-01
#>   [723,]   1.7612500625   3.9466655308   4.386477e+00
#>   [724,]  -0.1255960445  -1.0226510026  -7.241442e-01
#>   [725,]  -1.3792645577  -2.4392584306  -3.073601e+00
#>   [726,]   0.3561653375   1.4969055145   1.274851e+00
#>   [727,]  -1.0482608634  -1.2057651085  -1.976309e+00
#>   [728,]  -0.1063273913   0.8988622339   3.662428e-01
#>   [729,]   0.4993480880   0.5817646974   9.455319e-01
#>   [730,]   1.6775960456   2.7886873707   3.639533e+00
#>   [731,]  -1.1889188165  -2.7239821315  -2.994254e+00
#>   [732,]   0.8527713818   0.8020883721   1.508514e+00
#>   [733,]  -1.1370493102  -1.8986825035  -2.471567e+00
#>   [734,]   1.4239526761   2.6819733136   3.264023e+00
#>   [735,]   1.0851576974   1.4246470788   2.143789e+00
#>   [736,]   0.9274767286   1.1252844756   1.781030e+00
#>   [737,]  -0.7269716885  -2.1690920007  -2.110274e+00
#>   [738,]   2.0819442219   3.5577688210   4.570555e+00
#>   [739,]  -1.2888023557  -1.7169521636  -2.559947e+00
#>   [740,]  -0.5274226811  -1.6476098813  -1.572040e+00
#>   [741,]   0.8775596992   0.9293819930   1.610067e+00
#>   [742,]  -0.4426581326  -0.8007693599  -9.963791e-01
#>   [743,]  -0.2540320849   0.3940647442  -9.808339e-02
#>   [744,]   1.8123946296   4.2666785739   4.627847e+00
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#>   [748,]  -0.3434254827  -1.1679758931  -1.076422e+00
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#>   [753,]   0.2463262598   1.1943580866   9.699826e-01
#>   [754,]   0.3863132249   0.1027811719   5.387640e-01
#>   [755,]  -2.3525540156  -3.9753573826  -5.139744e+00
#>   [756,]  -2.0469028653  -1.5730917947  -3.425446e+00
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#>   [767,]  -0.5647314559  -1.5632351452  -1.571739e+00
#>   [768,]  -1.5071018731  -1.9990087322  -2.988691e+00
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#>   [936,]   0.8330605193   1.9832930047   2.139454e+00
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#>   [952,]  -0.4346874002 -0.7039495125 -9.327088e-01
#>   [953,]   0.2207737598  1.1900592243  9.357334e-01
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#>   [958,]  -0.8098163080 -1.7316174225 -1.970800e+00
#>   [959,]   0.6433616523  1.0448420133  1.382102e+00
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#>   [964,]  -2.3665266316 -3.5187958756 -4.903795e+00
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#>   [969,]   0.4645650616  2.1806049828  1.789448e+00
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#>   [991,]   1.3611096568   3.5407322198   3.662234e+00
#>   [992,]   1.7284325793   3.3596046062   4.019760e+00
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#> [1025,]  -0.0722977258   1.1578438173   5.524011e-01
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#> [1027,]   0.7167669110   0.5646564136   1.207154e+00
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#> [1190,]   0.4291910827  -0.0522999168   5.061683e-01
#> [1191,]  -1.8580646723  -2.6108901144  -3.765903e+00
#> [1192,]   0.7201199361   0.9205422553   1.408837e+00
#> [1193,]  -0.4902381807  -1.2372811450  -1.297956e+00
#> [1194,]  -2.2408757115  -3.1449411019  -4.539637e+00
#> [1195,]   2.4421585935   4.9667130764   5.801640e+00
#> [1196,]  -0.9730488624  -1.5234667569  -2.058832e+00
#> [1197,]   0.9219070390   1.5779835569   2.025314e+00
#> [1198,]   1.3190704330   2.1554823581   2.841056e+00
#> [1199,]  -0.1467486033  -0.3540392763  -3.794695e-01
#> [1200,]  -0.9482270299  -1.5753608149  -2.056679e+00
#> [1201,]   0.2101336634  -0.1131402705   1.992443e-01
#> [1202,]   1.5669597110   2.2098456764   3.180339e+00
#> [1203,]  -0.5835863396  -2.0829972295  -1.883697e+00
#> [1204,]  -0.7606450040  -1.2151628041  -1.622873e+00
#> [1205,]   0.4486858327  -0.0926763114   5.080706e-01
#> [1206,]   2.4563327552   3.8209323948   5.183454e+00
#> [1207,]  -0.1864153460  -0.2245389964  -3.570659e-01
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#> [1208,] -0.2011753867 -0.4329168949 -4.911124e-01
#> [1209,] -0.4225043579  0.1339939972 -4.524933e-01
#> [1210,] -1.1903586485 -1.8622867289 -2.517844e+00
#> [1211,]  2.3725032135  4.5537553947  5.485607e+00
#> [1212,]  0.9773637877  2.2083853260  2.444314e+00
#> [1213,] -2.1197418439 -4.1438935130 -4.942962e+00
#> [1214,] -0.0368779202 -0.7143782255 -4.424360e-01
#> [1215,]  1.6902023487  3.1942311430  3.880312e+00
#> [1216,] -0.9904691550 -0.8459581879 -1.704566e+00
#> [1217,]  0.3154267960  0.9917900346  9.437327e-01
#> [1218,] -0.2892772849  1.0590153735  2.269863e-01
#> [1219,]  1.0544107830  2.9003861465  2.924422e+00
#> [1220,] -1.9937664069 -2.1608923225 -3.685391e+00
#> [1221,] -0.7895884899  0.1716983479 -8.893153e-01
#> [1222,]  0.8946112256  2.5761625482  2.545224e+00
#> [1223,]  0.1075277066 -0.6287635428 -2.148526e-01
#> [1224,] -2.2835222033 -3.7131779933 -4.908164e+00
#> [1225,]  0.3977255362  0.8599030381  9.731658e-01
#> [1226,] -0.1473867620  0.2030527163 -7.110253e-02
#> [1227,]  1.0202613062  2.0896254130  2.431900e+00
#> [1228,]  0.5548934335  1.2518507096  1.386666e+00
#> [1229,] -0.2184043878 -0.5209283102 -5.614392e-01
#> [1230,] -0.2318088039  0.0008936068 -2.885649e-01
#> [1231,]  1.5268634286  2.8291427021  3.474023e+00
#> [1232,]  0.8811313961 -0.1994272393  9.880791e-01
#> [1233,] -0.9587493539 -2.0692347181 -2.343880e+00
#> [1234,]  1.2905933209  2.8110887179  3.169380e+00
#> [1235,] -0.9619768892 -0.8753601079 -1.685354e+00
#> [1236,]  0.2554793652  0.0295948167  3.350014e-01
#> [1237,] -1.4215583455 -2.5876792360 -3.208708e+00
#> [1238,]  0.9522346974  1.4191707086  1.974998e+00
#> [1239,] -0.0089743717  0.1209640758  5.593914e-02
#> [1240,]  0.1520582442  1.3055820218  9.141569e-01
#> [1241,] -1.2388714198 -0.5587538490 -1.854932e+00
#> [1242,]  0.9896353904  0.8239646427  1.691321e+00
#> [1243,]  1.3675685295  1.6367138764  2.613638e+00
#> [1244,] -1.0666572569 -2.9268308607 -2.954368e+00
#> [1245,]  0.8292623091  0.9816687262  1.578858e+00
#> [1246,]  0.6814222659  1.2886442310  1.564863e+00
#> [1247,] -0.0136463504  0.2936439506  1.459434e-01
#> [1248,]  0.2190907659  1.1323939944  9.016330e-01
#> [1249,]  0.2364636882  0.6003205444  6.280182e-01
#> [1250,]  0.7664162425  1.3898949986  1.727039e+00
#> [1251,] -0.3327103632 -0.7087948274 -8.082345e-01
#> [1252,] -0.7309821369 -1.7427791478 -1.878689e+00
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#> [1253,]   0.4963888651   0.8151874821   1.071382e+00
#> [1254,]   0.6576698721   2.5338463635   2.226280e+00
#> [1255,]   0.1581081427  -0.3901182163  -1.934165e-02
#> [1256,]   0.6057933049   2.0983954605   1.919934e+00
#> [1257,]   2.8763332983   4.1129886274   5.869265e+00
#> [1258,]  -2.2904296233  -3.3877696577  -4.736189e+00
#> [1259,]  -0.6976171956  -1.1913054968  -1.531039e+00
#> [1260,]   0.4060199506   0.7982607148   9.492999e-01
#> [1261,]  -0.3333176025  -1.0734213125  -1.011344e+00
#> [1262,]   0.5475598180   1.5429726282   1.539081e+00
#> [1263,]  -0.0960381213   0.2412271470   1.411339e-02
#> [1264,]  -0.5214573124  -1.7500019122  -1.621424e+00
#> [1265,]   1.1770919187   0.2928842671   1.630348e+00
#> [1266,]   1.8547390260   3.9117785970   4.483695e+00
#> [1267,]  -1.8535453051  -3.9159382989  -4.484515e+00
#> [1268,]  -0.8969296418  -2.2791621881  -2.383293e+00
#> [1269,]  -0.2803605132  -0.5892473666  -6.766115e-01
#> [1270,]   2.4552243596   3.6519552619   5.088297e+00
#> [1271,]   1.1565359278   3.1604455555   3.196092e+00
#> [1272,]   1.7051625037   4.3255578252   4.526806e+00
#> [1273,]  -0.6798809464  -1.1057709554  -1.461454e+00
#> [1274,]   0.4914697775   0.0561466587   6.440118e-01
#> [1275,]  -0.3674598755  -0.7860815132  -8.944573e-01
#> [1276,]   1.0281565032   0.9604028996   1.815074e+00
#> [1277,]   1.4911029091   2.6590008326   3.335009e+00
#> [1278,]  -1.4571330025  -1.4716004999  -2.633692e+00
#> [1279,]  -0.6275596787  -0.3373446825  -9.697663e-01
#> [1280,]   1.7762151133   3.4972684102   4.155742e+00
#> [1281,]   0.1489175012   0.4137597513   4.153164e-01
#> [1282,]   0.1896912355   0.3166872905   4.122893e-01
#> [1283,]   1.4990237375   2.3924108411   3.196940e+00
#> [1284,]  -1.1118666073  -2.1291810902  -2.568081e+00
#> [1285,]   0.0419111833  -0.6630278157  -3.156903e-01
#> [1286,]   0.0064571478   0.0043445909   1.046300e-02
#> [1287,]   0.9919012851   1.7684869122   2.218317e+00
#> [1288,]   0.2441313094  -0.1149980672   2.406077e-01
#> [1289,]   0.2672845125   1.4434854043   1.134372e+00
#> [1290,]   1.0001901486   1.8461531407   2.271754e+00
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#> [1292,]  -1.2783809430  -2.6302832252  -3.053812e+00
#> [1293,]  -0.8554954603  -0.2289663428  -1.193852e+00
#> [1294,]  -1.2250036739  -2.0086530586  -2.642273e+00
#> [1295,]   0.1044661119  -0.4902968464  -1.418271e-01
#> [1296,]  -0.7735068666  -1.8490279395  -1.990680e+00
#> [1297,]  -0.7454997611  -1.6987419429  -1.872354e+00
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#> [1298,]   0.0219492215 -0.3986351266 -1.938556e-01
#> [1299,]   2.2342128056  3.6733603663  4.824579e+00
#> [1300,]   2.4816291971  4.3061942681  5.484299e+00
#> [1301,]   0.8597978014  1.9689368846  2.164828e+00
#> [1302,]  -0.5605895673 -1.4072876364 -1.480029e+00
#> [1303,]   0.5534875186  0.5373753788  9.884085e-01
#> [1304,]  -1.3412187174 -3.1607122661 -3.426535e+00
#> [1305,]  -0.0938620560 -0.0312554337 -1.343895e-01
#> [1306,]  -1.1963011287 -2.4818001482 -2.869058e+00
#> [1307,]   0.6651333721  1.6520377607  1.746220e+00
#> [1308,]   0.6010652359  2.1593267264  1.947852e+00
#> [1309,]  -0.9339073056 -1.0762549291 -1.761840e+00
#> [1310,]   1.3030982443  1.7033846627  2.570244e+00
#> [1311,]   0.8775595375  1.3450231903  1.840730e+00
#> [1312,]  -0.2248276885 -0.3700329676 -4.857083e-01
#> [1313,]  -2.4732019820 -4.5584786796 -5.613797e+00
#> [1314,]   1.8527908387  2.5451284438  3.722832e+00
#> [1315,]  -2.1297061039 -3.2962117819 -4.484960e+00
#> [1316,]   0.4381248287  0.8117190897  9.968028e-01
#> [1317,]  -0.1534465028  0.3888366040  2.444338e-02
#> [1318,]  -0.5463267450 -0.2418428335 -8.154710e-01
#> [1319,]   0.9279565787  1.7259010613  2.114946e+00
#> [1320,]   0.5251919211 -0.6800144498  2.775241e-01
#> [1321,]  -1.0588882108 -1.8119225273 -2.325953e+00
#> [1322,]  -1.1428211805 -2.7965106179 -2.977021e+00
#> [1323,]  -2.6116010335 -3.7074061819 -5.314068e+00
#> [1324,]   1.3434853716  1.4769572996  2.494948e+00
#> [1325,]  -1.2487549136 -2.4092958149 -2.894230e+00
#> [1326,]  -0.2448026504 -0.8095643061 -7.545382e-01
#> [1327,]   0.4088583458  1.0147618767  1.072988e+00
#> [1328,]  -1.4099675583 -2.9463989144 -3.393329e+00
#> [1329,]  -1.9888028686 -1.7055771346 -3.426521e+00
#> [1330,]  -1.1224762706 -2.0193525098 -2.520361e+00
#> [1331,]   0.5209874935  1.3816221873  1.416403e+00
#> [1332,]  -3.1809817331 -4.5616331222 -6.498135e+00
#> [1333,]   0.2659586926 -0.4148106770  1.014425e-01
#> [1334,]  -1.5722246870 -3.5867464724 -3.951026e+00
#> [1335,]   0.2299475676  0.1430949020  3.661516e-01
#> [1336,]   0.1760516322  1.2950455788  9.382289e-01
#> [1337,]  -1.0699045365 -1.0064135906 -1.892667e+00
#> [1338,]  -0.1126845911 -0.7299926146 -5.456307e-01
#> [1339,]   0.5771275289  1.1559531867  1.361172e+00
#> [1340,]   0.8855255666  1.4144391829  1.889187e+00
#> [1341,]  -0.6801848277 -1.9958714848 -1.955802e+00
#> [1342,]   0.3401756864  1.1590973156  1.067443e+00
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#> [1343,]   0.8068281888   1.2093125745   1.677216e+00
#> [1344,]  -2.8476096656  -5.7233674697  -6.727140e+00
#> [1345,]   0.1082555434  -0.0383078113   1.137332e-01
#> [1346,]  -0.7548444192  -0.8420776835  -1.408593e+00
#> [1347,]  -1.9451751257  -3.2952112110  -4.254298e+00
#> [1348,]  -0.1240469045  -1.2090183092  -8.256385e-01
#> [1349,]  -0.0915074495   0.1836079698  -1.221319e-02
#> [1350,]   0.2978827412   0.6887067628   7.536571e-01
#> [1351,]   1.5695503995   3.0774607813   3.665059e+00
#> [1352,]   1.0820973562   2.3644628586   2.661531e+00
#> [1353,]   2.1797192125   2.3284403182   4.010252e+00
#> [1354,]  -0.6202695247  -1.1517125991  -1.412616e+00
#> [1355,]   0.4522692553   1.1368922257   1.194898e+00
#> [1356,]  -0.3679819410  -1.3461064350  -1.205899e+00
#> [1357,]  -1.0752984469  -1.5243336402  -2.186817e+00
#> [1358,]   1.2887505313   2.7483606834   3.132271e+00
#> [1359,]   0.5711979547   1.2213521166   1.390071e+00
#> [1360,]  -2.3235920636  -3.8954429637  -5.059280e+00
#> [1361,]   0.0959968155  -0.3672502362  -8.410243e-02
#> [1362,]   0.0391197374  -0.0558588038   1.778222e-02
#> [1363,]   0.8576058790   1.1815355992   1.725120e+00
#> [1364,]   2.1518980942   3.2312766485   4.476596e+00
#> [1365,]   0.7690512979   0.0464795567   9.847855e-01
#> [1366,]   2.3148462579   3.2755480871   4.704358e+00
#> [1367,]  -1.9049828715  -3.7197901677  -4.439803e+00
#> [1368,]   2.0296956412   3.8662585575   4.676601e+00
#> [1369,]  -0.3285287226   0.3970415480  -1.893272e-01
#> [1370,]   1.8080268381   3.4673049754   4.178782e+00
#> [1371,]   1.6327460767   3.1177456777   3.766219e+00
#> [1372,]  -0.5254528733  -1.4636473481  -1.467492e+00
#> [1373,]  -0.1151179784   0.6779537917   2.326862e-01
#> [1374,]  -1.9993370888  -4.5911065607  -5.041004e+00
#> [1375,]   1.9544393425   1.9873067213   3.540018e+00
#> [1376,]  -2.3873393533  -4.2547611158  -5.338178e+00
#> [1377,]   1.3728078838   1.0840011501   2.313439e+00
#> [1378,]   1.6812192292   3.9257911316   4.275096e+00
#> [1379,]   0.5673863950   0.5367503049   1.005393e+00
#> [1380,]   0.6944231616   1.5992366412   1.753441e+00
#> [1381,]   0.9825844771   2.4949831226   2.609874e+00
#> [1382,]  -1.6073217934  -3.5890754607  -3.996084e+00
#> [1383,]  -0.9230204419  -2.0740707289  -2.302010e+00
#> [1384,]  -0.8514118974  -2.4542038993  -2.423674e+00
#> [1385,]  -0.7007533774  -1.6305741998  -1.778726e+00
#> [1386,]   0.5917720859   1.1956532262   1.401465e+00
#> [1387,]  -1.4155773028  -1.8308951002  -2.781266e+00
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#> [1388,]   0.1293645596  -0.3294342701  -2.150726e-02
#> [1389,]   0.3564034535   0.4280711579   6.819894e-01
#> [1390,]  -0.2353434754  -0.7908266415  -7.323442e-01
#> [1391,]   1.0001606980   3.0142968430   2.919989e+00
#> [1392,]   0.4288697074   0.9231098329   1.047079e+00
#> [1393,]  -1.1779378338  -1.9677350017  -2.560875e+00
#> [1394,]  -2.1845736880  -3.1803142862  -4.489060e+00
#> [1395,]  -0.4861429848   0.5017274047  -3.277727e-01
#> [1396,]   0.8671508847   2.1629388843   2.281660e+00
#> [1397,]  -3.0852491397  -5.8557033640  -7.096913e+00
#> [1398,]  -0.2400845768   1.1358839008   3.309874e-01
#> [1399,]   0.0400738196  -0.3690483750  -1.548352e-01
#> [1400,]  -1.1207071840  -1.1846570931  -2.054934e+00
#> [1401,]  -0.1109689561   0.5487516537   1.661582e-01
#> [1402,]  -1.4528946062  -2.7095229738  -3.315402e+00
#> [1403,]   0.2943522440  -0.3636054787   1.652654e-01
#> [1404,]   0.0124041982  -0.1500760361  -6.781813e-02
#> [1405,]   0.6501799866   1.9502761286   1.893083e+00
#> [1406,]   1.9452332483   2.8743331465   4.020801e+00
#> [1407,]  -0.0251712863   0.9468014684   4.940471e-01
#> [1408,]  -1.0148664005  -0.1546353873  -1.351334e+00
#> [1409,]  -0.4839367680  -0.3609275134  -8.037589e-01
#> [1410,]  -0.5722327694  -0.5414942136  -1.014069e+00
#> [1411,]  -0.9730548586  -1.3282615124  -1.950509e+00
#> [1412,]  -1.8874842285  -2.0762641917  -3.505894e+00
#> [1413,]  -0.3795508408  -1.5840133501  -1.352353e+00
#> [1414,]  -0.7688269204  -2.5048549840  -2.348801e+00
#> [1415,]   0.7002596021   0.8667452638   1.354217e+00
#> [1416,]  -0.6491163538   0.0702415908  -7.704537e-01
#> [1417,]   0.5182371085   1.2212997791   1.324001e+00
#> [1418,]   1.7012142302   1.5043537247   2.956233e+00
#> [1419,]   0.6087388872   0.6188250662   1.102507e+00
#> [1420,]  -0.6886731324  -1.6751256601  -1.788386e+00
#> [1421,]   2.1725728028   3.1995105779   4.484748e+00
#> [1422,]  -0.6314045794  -1.5880242315  -1.668636e+00
#> [1423,]  -1.4761954186  -3.2280999304  -3.632246e+00
#> [1424,]  -0.8204040258  -0.5489633505  -1.327679e+00
#> [1425,]  -2.1640839644  -2.4764273568  -4.072882e+00
#> [1426,]  -0.4845417923  -0.5616419251  -9.159015e-01
#> [1427,]   2.3908203451   3.4095950281   4.873487e+00
#> [1428,]  -0.2972026440  -1.2213477473  -1.048402e+00
#> [1429,]   0.4571387732   0.8405322350   1.036503e+00
#> [1430,]  -1.0592145389  -1.4790665150  -2.141639e+00
#> [1431,]   0.5070610812   1.1826826087   1.288634e+00
#> [1432,]  -0.2962578946   0.5173764617  -8.230528e-02
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#> [1433,] -0.5076532022 -0.4176934729 -8.648356e-01
#> [1434,] -0.0993262019 -1.0683033722 -7.167214e-01
#> [1435,] -0.3954131424  0.4863118672 -2.231894e-01
#> [1436,]  1.5479788078  2.0730608644  3.080760e+00
#> [1437,]  1.7468845383  3.7361215060  4.251720e+00
#> [1438,] -0.1651224014 -0.5501128190 -5.111938e-01
#> [1439,] -0.7938372760 -1.2735218221 -1.696650e+00
#> [1440,]  1.1180870377  1.7485302254  2.364593e+00
#> [1441,]  0.5322655990  1.2458554690  1.355122e+00
#> [1442,] -0.3732627792 -0.4166584346 -6.966791e-01
#> [1443,] -0.2062075672 -0.6318749973 -6.078008e-01
#> [1444,] -0.5374590385  0.1068810646 -6.108859e-01
#> [1445,] -1.1495082814 -2.0434564340 -2.567446e+00
#> [1446,] -0.6171643463 -0.6466966189 -1.128481e+00
#> [1447,] -1.5867518889 -1.1471181624 -2.615250e+00
#> [1448,] -0.1708204737 -0.3743662945 -4.207673e-01
#> [1449,]  1.3748400846  1.3188067599  2.446280e+00
#> [1450,]  0.0391938615 -0.1104559320 -1.242447e-02
#> [1451,] -0.6136280604 -1.3884175898 -1.535695e+00
#> [1452,] -1.4977253591 -2.7650844229 -3.402139e+00
#> [1453,] -0.0777577272  0.5046622876  1.831041e-01
#> [1454,]  0.8892055348  0.5059974559  1.389629e+00
#> [1455,] -0.3408781394  0.6158647030 -8.328896e-02
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#> [1458,]  0.9119951985  0.8583243508  1.613573e+00
#> [1459,]  0.5107718914  0.1891232650  7.418776e-01
#> [1460,] -1.4216521014 -1.9480224839 -2.853842e+00
#> [1461,] -0.4235718422 -1.0278428613 -1.098595e+00
#> [1462,]  1.4266806224  0.6414157021  2.135000e+00
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#> [1467,]  1.1376901041  3.2354955204  3.214241e+00
#> [1468,] -0.4408966280 -0.7129162960 -9.454278e-01
#> [1469,] -0.7320207752 -2.1852127305 -2.125517e+00
#> [1470,] -1.2013161584 -1.5124899270 -2.337385e+00
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#> [1474,] -0.4236370740 -0.1704741862 -6.228728e-01
#> [1475,]  0.5278653606  1.1968399016  1.322433e+00
#> [1476,]  0.6529564179  2.9445037739  2.448300e+00
#> [1477,] -0.0406436093 -0.1187011147 -1.165559e-01
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#> [1478,]   0.8717593376   2.7145081433   2.593504e+00
#> [1479,]  -0.0009884083  -0.0731704841  -4.183908e-02
#> [1480,]  -2.0506005818  -3.2851186842  -4.380160e+00
#> [1481,]   1.4001822480   2.3949406699   3.075091e+00
#> [1482,]  -0.6255224107   0.5186002370  -4.922123e-01
#> [1483,]   0.4415413209   0.5025405628   8.294820e-01
#> [1484,]  -0.3163967080  -0.9996491065  -9.493036e-01
#> [1485,]  -1.4269418727  -4.2245039592  -4.123790e+00
#> [1486,]   0.0896054712   0.0422558774   1.351864e-01
#> [1487,]   1.1407569355   1.4456008325   2.224749e+00
#> [1488,]   0.6479436739   2.3079749509   2.088802e+00
#> [1489,]  -0.1671693532   0.3669264194  -4.827973e-03
#> [1490,]   0.3448779802   0.8543456966   9.041819e-01
#> [1491,]   0.1262804991   1.1770244883   8.106685e-01
#> [1492,]  -1.3385533369  -2.2171087597  -2.899551e+00
#> [1493,]  -3.1162047148  -5.9597070168  -7.193232e+00
#> [1494,]  -2.0615811865  -3.0336588418  -4.254303e+00
#> [1495,]  -0.9076341980  -2.6332889275  -2.593166e+00
#> [1496,]   0.6074696065   1.4888748798   1.583765e+00
#> [1497,]  -0.4368037986  -1.5564355469  -1.408442e+00
#> [1498,]   2.1666344331   2.6155349565   4.153261e+00
#> [1499,]  -2.0358232761  -3.0623519464  -4.238107e+00
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#> [1501,]   1.1228697518   2.6539720540   2.873039e+00
#> [1502,]   2.0450975608   3.1315798397   4.288091e+00
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#> [1504,]  -2.1577398670  -5.1963738959  -5.574428e+00
#> [1505,]   0.6229953122   1.2685896290   1.480877e+00
#> [1506,]   1.3368645828   2.4533566198   3.028553e+00
#> [1507,]   1.9123307515   4.0828495024   4.650448e+00
#> [1508,]   0.7971730664   0.4794504693   1.260133e+00
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#> [1510,]  -2.2614287295  -3.8656267400  -4.965216e+00
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#> [1512,]  -0.5379521197   0.2626011384  -5.250827e-01
#> [1513,]   0.6257838735   1.2028565436   1.447875e+00
#> [1514,]  -0.3179844178   0.2193401189  -2.747955e-01
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#> [1516,]  -0.2798027911  -2.0197093676  -1.469763e+00
#> [1517,]  -1.7085517224  -3.7085092308  -4.188597e+00
#> [1518,]  -0.0680813183   0.8906236217   4.093628e-01
#> [1519,]   0.9699278718   2.9137769583   2.826504e+00
#> [1520,]   1.5409417256   2.4838081706   3.299932e+00
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#> [1523,]   2.1645195021   3.8397190084   4.829995e+00
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#> [1532,]   2.1511118535   2.4229878421   4.027049e+00
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#> [1534,]  -1.4378717422  -1.9619206803  -2.881781e+00
#> [1535,]  -0.9770391717  -0.9625839154  -1.752542e+00
#> [1536,]   0.6298751796   1.1625756102   1.430622e+00
#> [1537,]   2.8147042653   4.8352211601   6.193224e+00
#> [1538,]   0.7612358938   1.3992393764   1.725765e+00
#> [1539,]   1.0576515954   2.3155544172   2.603906e+00
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#> [1541,]  -0.1213110337   0.5429117602   1.500209e-01
#> [1542,]   0.0209613266   0.5039180762   3.057918e-01
#> [1543,]  -0.1502792476   0.3226624294  -8.331018e-03
#> [1544,]  -0.2716820818  -0.6841326698  -7.184470e-01
#> [1545,]   1.4049673310   2.7513930588   3.278874e+00
#> [1546,]   0.7100174482   0.2146986337   1.004526e+00
#> [1547,]   1.1776780002   2.5360258296   2.875929e+00
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#> [1549,]  -0.2719542645  -1.1960765310  -1.002894e+00
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#> [1551,]   0.7230664702  -0.0931637558   8.499472e-01
#> [1552,]   1.8545115160   2.8274477794   3.881653e+00
#> [1553,]  -0.2028780401  -2.1195318061  -1.429236e+00
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#> [1555,]  -0.5039673425  -0.6318241149  -9.790729e-01
#> [1556,]   0.9732737680   2.3374263786   2.510826e+00
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#> [1565,]   1.1064468273   2.1327763509   2.563318e+00
#> [1566,]   0.5768542241   0.6139981075   1.060069e+00
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#> [1568,]   0.0339388538   0.1857436945   1.454010e-01
#> [1569,]   1.0900367108   1.8782966114   2.401630e+00
#> [1570,]  -1.6920312021  -2.3705875973  -3.425505e+00
#> [1571,]   1.7496767630   1.9743266472   3.277480e+00
#> [1572,]   0.7314859996   1.6987630269   1.854890e+00
#> [1573,]   1.6882708202   3.1074559732   3.829747e+00
#> [1574,]   1.2920458790   2.6157870837   3.062807e+00
#> [1575,]  -0.3001931105  -1.3119167237  -1.102394e+00
#> [1576,]  -0.0404795766   1.2054620646   6.185038e-01
#> [1577,]   1.9827559347   3.7697436368   4.564506e+00
#> [1578,]  -0.6244407996  -1.5829668230  -1.657145e+00
#> [1579,]   1.3959521351   1.7285290566   2.699985e+00
#> [1580,]  -1.2075504300  -2.3817381391  -2.827556e+00
#> [1581,]   1.8561445710   2.6165252842   3.766636e+00
#> [1582,]  -0.7769625282  -1.4749318495  -1.787382e+00
#> [1583,]   1.3646868673   3.5685507597   3.682133e+00
#> [1584,]   1.6374988982   3.3081519675   3.877814e+00
#> [1585,]   0.4349969699  -0.4112702570   3.141946e-01
#> [1586,]  -0.6469137736  -1.4403645190  -1.606030e+00
#> [1587,]   0.4058548585   0.9427706558   1.029291e+00
#> [1588,]   0.1796118542  -0.4522670828  -2.701698e-02
#> [1589,]   0.8638395988   1.5796487609   1.953829e+00
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#> [1592,]   1.0227838950   2.0685797303   2.423366e+00
#> [1593,]  -0.2224025448   0.2040481100  -1.640933e-01
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#> [1595,]  -1.3812803400  -2.0551531842  -2.862952e+00
#> [1596,]   0.1871544511   2.0969955063   1.397122e+00
#> [1597,]   1.3257706595   2.2968214977   2.927849e+00
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#> [1599,]  -1.2329182927  -1.5256886281  -2.384117e+00
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#> [1608,]  -0.1444496812  -1.4783160830  -1.000529e+00
#> [1609,]   2.0490191896   2.7148332674   4.061704e+00
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#> [1623,] -1.0733818402 -1.2333405084 -2.022938e+00
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#> [1626,] -1.1436243887 -1.4866952417 -2.251130e+00
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#> [1631,]  0.8688925121  1.8969624696  2.136226e+00
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#> [1655,] -1.1873525472 -1.7437612711 -2.448319e+00
#> [1656,]  1.1625633047  1.6774727964  2.380620e+00
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#> [1661,]  0.4091722396  1.4001730372  1.287267e+00
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#> [1679,] -0.0424869298 -0.2496906706 -1.915482e-01
#> [1680,]  2.5708558781  2.6625487472  4.683408e+00
#> [1681,]  0.6867412529  2.0733001256  2.006947e+00
#> [1682,] -0.3485694747 -0.8121455159 -8.853658e-01
#> [1683,] -0.1561525279 -0.5062118250 -4.756454e-01
#> [1684,]  0.6668481314  1.1124187357  1.448892e+00
#> [1685,]  1.0040139915  1.0541335353  1.836985e+00
#> [1686,] -0.9077251637 -1.8634606735 -2.166057e+00
#> [1687,] -1.0507569889 -2.2135040103 -2.538675e+00
#> [1688,]  0.9193676041  1.4888548517  1.972685e+00
#> [1689,] -0.9624570784 -1.8090193075 -2.204094e+00
#> [1690,]  1.7618131515  2.8775213203  3.793849e+00
#> [1691,]  0.3432978984 -0.7363890542  1.942038e-02
#> [1692,]  1.3591795336  1.5812342890  2.572388e+00
#> [1693,]  1.0471663707  3.0785072049  3.014238e+00
#> [1694,]  0.4447303601 -0.3173291273  3.784653e-01
#> [1695,] -0.2585455015 -2.0163768428 -1.441406e+00
#> [1696,]  1.9148976052  4.2266494727  4.733452e+00
#> [1697,]  0.3891792327  0.2959520386  6.495396e-01
#> [1698,] -1.8347200968 -3.9648617554 -4.488191e+00
#> [1699,]  1.8528164774  3.1777125310  4.073922e+00
#> [1700,] -0.3788797282 -0.2205776862 -5.948667e-01
#> [1701,] -0.3650787164 -1.8519214636 -1.482985e+00
#> [1702,] -1.2687093677 -2.2374796748 -2.823762e+00
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#> [1703,]  -0.1040327795  -0.4160343344  -3.606084e-01
#> [1704,]  -1.0630596947  -3.0250852950  -3.004409e+00
#> [1705,]  -0.4269354063  -1.1069368643  -1.146683e+00
#> [1706,]   1.7714005050   3.3798102855   4.084554e+00
#> [1707,]  -2.4671139564  -4.9752914561  -5.837519e+00
#> [1708,]   0.3023620731  -0.6908459905  -6.351262e-03
#> [1709,]   1.9925297689   3.4977300088   4.425738e+00
#> [1710,]  -1.5247465684  -2.7464199255  -3.425476e+00
#> [1711,]  -1.2160327865  -1.2843129427  -2.229108e+00
#> [1712,]  -0.0609935277   0.4021769545   1.471337e-01
#> [1713,]  -1.2903225163  -3.2715443474  -3.424576e+00
#> [1714,]  -1.2871582965  -1.9618680070  -2.693815e+00
#> [1715,]  -1.4394148544  -1.8167355097  -2.803133e+00
#> [1716,]   0.5782112527  -0.3495533734   5.270302e-01
#> [1717,]  -0.6797467109  -2.1979329490  -2.067391e+00
#> [1718,]   0.5831319888   0.5722197137   1.044712e+00
#> [1719,]   0.8397640895   1.9492972800   2.128947e+00
#> [1720,]  -0.4254095381  -0.5211639445  -8.197012e-01
#> [1721,]  -0.7098383590   0.6265747761  -5.374312e-01
#> [1722,]   0.0811891935   1.2072004119   7.711870e-01
#> [1723,]   0.9313823850   1.0391338805   1.738091e+00
#> [1724,]  -0.0578393445  -0.0824457056  -1.178784e-01
#> [1725,]  -0.4059512287  -1.6036813896  -1.396189e+00
#> [1726,]   0.3001002340   0.6139304031   7.149245e-01
#> [1727,]   0.6511825543   1.6829069437   1.745954e+00
#> [1728,]   2.0290959754   3.1425839016   4.274244e+00
#> [1729,]  -1.8187029728  -3.9202868507  -4.443481e+00
#> [1730,]  -0.5117150579  -0.0283903315  -6.538537e-01
#> [1731,]   0.7078257092   0.1158080763   9.469129e-01
#> [1732,]   1.3952003438   1.7676890274   2.720780e+00
#> [1733,]   1.4192794560   2.4053764275   3.104696e+00
#> [1734,]  -0.8162564547  -0.5674611606  -1.332772e+00
#> [1735,]  -1.9043040357  -4.8150953837  -5.046805e+00
#> [1736,]  -0.0636786286   0.8735642463   4.053856e-01
#> [1737,]  -0.6895560138  -0.4360492993  -1.101851e+00
#> [1738,]   1.4602409527   2.4880120158   3.201633e+00
#> [1739,]   1.5432838912   2.2099853607   3.150893e+00
#> [1740,]   0.4768985965   1.5431674493   1.451076e+00
#> [1741,]  -0.8321751831  -1.7724134069  -2.021321e+00
#> [1742,]   2.1360314904   3.8505692034   4.800492e+00
#> [1743,]  -1.1561539948  -3.4577316276  -3.360597e+00
#> [1744,]   0.1171711972  -0.1951033143   3.783592e-02
#> [1745,]  -1.2081092402  -2.2247024129  -2.741104e+00
#> [1746,]  -0.2680478098  -0.2161804249  -4.542212e-01
#> [1747,]  -0.5826929949  -1.1524935895  -1.366192e+00
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#> [1748,]  -0.1054808013  -0.1243761688  -2.005560e-01
#> [1749,]  -0.1949037519  -0.2290562135  -3.701576e-01
#> [1750,]   0.3840857698   0.1224319467   5.468917e-01
#> [1751,]  -0.5605247077  -2.0617437786  -1.843144e+00
#> [1752,]   0.6332473662   2.3600365790   2.099368e+00
#> [1753,]  -0.6009867931  -0.5346045861  -1.046101e+00
#> [1754,]  -1.6405584430  -3.5723339051  -4.028239e+00
#> [1755,]  -0.6029275747  -0.0751416364  -7.935389e-01
#> [1756,]  -0.1161038198  -0.3575884777  -3.432257e-01
#> [1757,]  -0.4923015066  -0.4720266378  -8.758450e-01
#> [1758,]   0.2006663999   0.6510524192   6.115337e-01
#> [1759,]  -1.9402453914  -4.1348125726  -4.714094e+00
#> [1760,]   0.6551580681   2.2455658790   2.063164e+00
#> [1761,]   0.5654592020   0.9064897685   1.208180e+00
#> [1762,]   2.6544291704   3.8896880853   5.468633e+00
#> [1763,]   0.8705544553   2.3343073841   2.381007e+00
#> [1764,]  -0.8983360178  -0.5551873543  -1.428312e+00
#> [1765,]   0.9402951258   0.6162843047   1.514541e+00
#> [1766,]   0.0119156416  -1.0248880399  -5.539114e-01
#> [1767,]   0.6371854684  -0.0609094632   7.607551e-01
#> [1768,]  -1.4615767346  -2.1180328462  -2.997976e+00
#> [1769,]   2.3145685454   4.2499130855   5.244744e+00
#> [1770,]  -2.4310975574  -3.5025738368  -4.975311e+00
#> [1771,]  -1.7945157874  -1.9198984348  -3.303188e+00
#> [1772,]  -0.9989910580  -1.4426010185  -2.046305e+00
#> [1773,]  -1.2754436023  -1.1188144915  -2.211347e+00
#> [1774,]  -0.8868070616  -1.3393439682  -1.849110e+00
#> [1775,]  -0.9657021876  -2.4466502808  -2.561999e+00
#> [1776,]  -0.2235558135  -1.0363871542  -8.539210e-01
#> [1777,]  -1.3147708234  -1.8325932210  -2.656505e+00
#> [1778,]  -0.9269201571  -1.3984850549  -1.931951e+00
#> [1779,]  -0.8145748695   0.8609279297  -5.379793e-01
#> [1780,]   0.8988320147   1.9506183275   2.203337e+00
#> [1781,]   0.4765904818   1.2305097276   1.277180e+00
#> [1782,]   1.0900942266   2.4721322340   2.731255e+00
#> [1783,]   0.4324788964   1.3522876568   1.289755e+00
#> [1784,]  -1.8335627635  -2.5110278794  -3.679931e+00
#> [1785,]   1.3879831149   2.2027481819   2.953220e+00
#> [1786,]   0.5456776103   1.0762925513   1.277746e+00
#> [1787,]  -0.1383149703  -1.1550366328  -8.134729e-01
#> [1788,]   1.2601683439   2.0182694092   2.691459e+00
#> [1789,]   0.7827627316   0.0795365640   1.020229e+00
#> [1790,]  -0.4456276101   0.2519079598  -4.158902e-01
#> [1791,]  -1.7167480631  -2.6992886267  -3.638742e+00
#> [1792,]  -0.7963161920  -1.5094560007  -1.830675e+00
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#> [1793,]   0.5130637394   0.9829103186   1.185254e+00
#> [1794,]   0.3017322804  -0.1019073882   3.196997e-01
#> [1795,]   0.8532558839   1.3795324930   1.829575e+00
#> [1796,]   1.1902231538   2.8321003562   3.055881e+00
#> [1797,]  -1.1928677319  -1.6027431105  -2.376937e+00
#> [1798,]   1.1213976385   1.5552525227   2.261460e+00
#> [1799,]   0.5488869979   0.9399939757   1.206108e+00
#> [1800,]   0.3259555615  -0.0404274857   3.840244e-01
#> [1801,]   1.6178956717   2.7171207414   3.525371e+00
#> [1802,]   0.7982698086   1.2514025139   1.689902e+00
#> [1803,]  -0.7842502934  -1.5391190546  -1.832091e+00
#> [1804,]   1.4192824664   1.4734958837   2.587545e+00
#> [1805,]  -0.0899533694  -1.6258177219  -1.014431e+00
#> [1806,]   2.6003402787   4.9811519488   6.006902e+00
#> [1807,]  -0.2896112246  -1.3765480768  -1.125066e+00
#> [1808,]  -0.1846552557  -0.8859286148  -7.219146e-01
#> [1809,]  -0.0730949922   0.9429533009   4.321516e-01
#> [1810,]   0.2369583480  -0.9577605686  -2.360348e-01
#> [1811,]   0.1125452917  -0.1505856526   5.677295e-02
#> [1812,]   0.6273571150   0.4518139060   1.033039e+00
#> [1813,]   0.7579397751   0.8008964909   1.389599e+00
#> [1814,]  -2.1757584038  -2.9988067562  -4.377339e+00
#> [1815,]   0.1070496274   0.6204576060   4.778167e-01
#> [1816,]  -0.0575232635   0.6687665190   2.994071e-01
#> [1817,]  -1.1019353430  -1.9378791286  -2.449533e+00
#> [1818,]   1.3952891154   2.6369887511   3.203315e+00
#> [1819,]   0.1773561005  -0.2225099944   9.767571e-02
#> [1820,]  -0.9073912879  -1.6411195587  -2.042251e+00
#> [1821,]   0.5005001729   0.6717717683   9.969187e-01
#> [1822,]  -0.1407796314  -2.3203614416  -1.463253e+00
#> [1823,]  -1.4291011408  -1.6465422139  -2.695822e+00
#> [1824,]  -0.5123501696  -0.3887441332  -8.546269e-01
#> [1825,]  -0.8210188724  -2.4959051778  -2.408917e+00
#> [1826,]  -2.0723684561  -3.2551169504  -4.390655e+00
#> [1827,]   0.9003869642   1.0839138613   1.724291e+00
#> [1828,]   1.5457105015   2.2911508943   3.198962e+00
#> [1829,]   0.5738231597   0.6768910134   1.091192e+00
#> [1830,]  -0.4405031691  -0.7391038863  -9.594702e-01
#> [1831,]   0.4481176944   1.0044924475   1.116245e+00
#> [1832,]   0.1324103733  -0.2392865976   3.231899e-02
#> [1833,]  -1.8940210647  -3.9944842701  -4.578577e+00
#> [1834,]  -0.4257841977  -1.8488454652  -1.556976e+00
#> [1835,]   0.3527085689  -0.4138025563   2.101773e-01
#> [1836,]   1.2457121040   2.1498128737   2.746434e+00
#> [1837,]   0.1520022487   0.7340601424   5.969163e-01
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#> [1838,] -2.6641508080 -4.3836875199 -5.754905e+00
#> [1839,]  0.7773678544  0.9367436890  1.489215e+00
#> [1840,] -1.2307567333 -2.5222546115 -2.934474e+00
#> [1841,]  0.7728242600  1.5153876583  1.804673e+00
#> [1842,]  1.1843452559  2.4766204064  2.851275e+00
#> [1843,] -0.0902817259  0.2823822700  4.413087e-02
#> [1844,] -0.4863847421 -1.0745415076 -1.202837e+00
#> [1845,]  0.5939901491  1.8894554638  1.789262e+00
#> [1846,]  0.7192187859  2.0475939487  2.033180e+00
#> [1847,]  1.0260901951  1.1795289194  1.934103e+00
#> [1848,] -0.9431814276 -0.6962915088 -1.562541e+00
#> [1849,] -0.5265927131 -1.4451751560 -1.458662e+00
#> [1850,] -1.5436499317 -3.3765513223 -3.798745e+00
#> [1851,]  0.5789487753  0.9012750748  1.222107e+00
#> [1852,]  0.9971768389  2.2191670618  2.475004e+00
#> [1853,]  0.9845575186  1.9435276301  2.306300e+00
#> [1854,]  0.2388579973  2.2295937623  1.535182e+00
#> [1855,]  1.1031944633  0.7486714012  1.791142e+00
#> [1856,]  0.9758053167  1.4720549615  2.033738e+00
#> [1857,]  0.8884014010  1.7410769972  2.074043e+00
#> [1858,]  0.3346478647  1.0019275413  9.733269e-01
#> [1859,] -2.4697142344 -4.9663103962 -5.835778e+00
#> [1860,]  1.6039140303  2.5210258695  3.399112e+00
#> [1861,] -1.9727687425 -3.5766242404 -4.444879e+00
#> [1862,] -2.2100356898 -3.7203755153 -4.820522e+00
#> [1863,]  0.5047977980  1.8061986998  1.631837e+00
#> [1864,]  0.9779148391  2.0446333975  2.354126e+00
#> [1865,] -1.7387690942 -2.4836240180 -3.546517e+00
#> [1866,] -0.5317826732 -1.9930715868 -1.769193e+00
#> [1867,] -0.7902499784 -1.6934709575 -1.925231e+00
#> [1868,] -1.3407816749 -1.8695701328 -2.709461e+00
#> [1869,]  0.4768822554  1.3070990473  1.320048e+00
#> [1870,] -0.8677037904 -0.9802139635 -1.625987e+00
#> [1871,]  0.3708121698  0.2365069272  5.936467e-01
#> [1872,]  1.4332380782  2.2819564153  3.053609e+00
#> [1873,]  0.2009344868  0.3695459979  4.556438e-01
#> [1874,] -1.5685800898 -3.1645627768 -3.712187e+00
#> [1875,] -1.4820949876 -3.2892108654 -3.673517e+00
#> [1876,] -0.3042325042  0.2975927563 -2.142202e-01
#> [1877,] -1.9828282595 -2.6358997513 -3.935360e+00
#> [1878,] -3.1244133359 -5.7234881132 -7.072376e+00
#> [1879,] -1.6578093136 -2.9669932338 -3.713811e+00
#> [1880,]  1.8611009706  3.7258039183  4.388420e+00
#> [1881,]  0.0364733895 -0.1970828525 -6.389116e-02
#> [1882,]  1.1486347646  1.7361730734  2.395827e+00
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#> [1883,] -2.6155942363 -4.6504400477 -5.842392e+00
#> [1884,] -1.7931511088 -3.3416197359 -4.090482e+00
#> [1885,]  1.8398410205  3.2591189328  4.102919e+00
#> [1886,] -0.7398995747 -0.6272316165 -1.270727e+00
#> [1887,]  0.0640767014 -0.3059108055 -8.986535e-02
#> [1888,]  1.1442762341  3.6772656250  3.467618e+00
#> [1889,] -0.0887558506  0.5282019098  1.824532e-01
#> [1890,]  0.3231738471 -0.1305022291  3.305679e-01
#> [1891,] -1.7073717259 -2.6998538577 -3.627364e+00
#> [1892,]  0.3247689978  1.1600194824  1.048743e+00
#> [1893,] -0.0537799119 -0.5865769387 -3.925881e-01
#> [1894,]  1.5208714093  2.3612941943  3.206915e+00
#> [1895,] -0.7075410596 -0.5387471853 -1.181271e+00
#> [1896,] -0.1343409895 -1.6440925889 -1.079923e+00
#> [1897,] -1.4412682464 -1.9098611546 -2.857125e+00
#> [1898,] -2.0205505168 -4.3875294186 -4.954480e+00
#> [1899,] -0.1677739565 -0.4714716386 -4.708577e-01
#> [1900,] -0.5075483077 -1.7648401781 -1.612315e+00
#> [1901,]  1.6956434161  0.6885318991  2.496539e+00
#> [1902,]  0.2617510027 -0.1388420086  2.493467e-01
#> [1903,]  0.4693593729  1.3899740798  1.356659e+00
#> [1904,]  1.4849331879  2.4204834593  3.194948e+00
#> [1905,] -1.4372455827 -2.0096958822 -2.907513e+00
#> [1906,]  1.1241057907  1.8649902036  2.436728e+00
#> [1907,] -2.1149587640 -3.1822828701 -4.403344e+00
#> [1908,]  0.7802137119  1.8383228439  1.993103e+00
#> [1909,] -0.2415112602  0.2845785226 -1.432305e-01
#> [1910,]  0.9425571453  0.7972967091  1.617816e+00
#> [1911,]  0.9544988553 -0.1079838141  1.130314e+00
#> [1912,] -0.0936517035  0.9558533020  4.136768e-01
#> [1913,] -0.6218694172 -1.7343882105 -1.737971e+00
#> [1914,] -0.4411667714 -1.1041268770 -1.162870e+00
#> [1915,] -0.8467071503 -2.5898720713 -2.493097e+00
#> [1916,]  0.4206782458  0.5733140493  8.427425e-01
#> [1917,] -0.8394322916 -1.5140412726 -1.886984e+00
#> [1918,] -0.3845765996  0.3060445461 -3.097173e-01
#> [1919,]  0.3942412068  1.1604693561  1.135623e+00
#> [1920,] -0.9346015032 -1.3148159841 -1.895097e+00
#> [1921,]  0.4214608520  0.4667194695  7.845629e-01
#> [1922,] -0.9153344032 -2.8355123708 -2.714994e+00
#> [1923,]  0.1403755378  1.0755556226  7.719338e-01
#> [1924,]  1.1427974031  1.3370220980  2.167036e+00
#> [1925,]  2.0997454454  1.7405106695  3.584250e+00
#> [1926,] -3.1803819798 -5.4251287749 -6.976591e+00
#> [1927,] -1.7843860494 -3.1707345440 -3.984718e+00
```

```
#> [1928,]  1.0047889413  2.8429679552  2.830680e+00
#> [1929,] -1.3979544346 -2.0658295016 -2.889670e+00
#> [1930,] -1.1538104389 -2.6357637659 -2.901517e+00
#> [1931,] -0.8164174429 -0.7506544974 -1.434638e+00
#> [1932,] -1.1729352235 -1.6944348587 -2.402967e+00
#> [1933,] -0.6557370694 -1.6623354382 -1.740217e+00
#> [1934,]  0.5842946306  1.2154924921  1.403151e+00
#> [1935,] -1.4782889557 -1.0189994204 -2.408898e+00
#> [1936,] -1.3709677360 -2.5361786235 -3.117042e+00
#> [1937,] -1.1588099762 -2.2013477565 -2.666668e+00
#> [1938,] -0.5355246449 -1.8208110717 -1.678262e+00
#> [1939,]  0.1223234755  0.9730528729  6.925385e-01
#> [1940,]  1.0988948090  1.5440832267  2.227201e+00
#> [1941,] -0.8578675203 -1.7221902497 -2.025487e+00
#> [1942,] -1.5452147386 -0.7567216151 -2.346800e+00
#> [1943,]  1.9885475264  2.1956313188  3.698162e+00
#> [1944,]  0.2970834156  1.9763200683  1.467232e+00
#> [1945,]  1.2556025677  2.2193675685  2.797367e+00
#> [1946,] -0.4421341247 -0.4545764175 -8.036031e-01
#> [1947,]  0.5811728222  0.3478000069  9.177251e-01
#> [1948,] -1.3537726163 -2.8819523408 -3.287490e+00
#> [1949,] -1.8691217803 -5.0354222625 -5.125205e+00
#> [1950,]  1.1564612300  1.0287901959  2.013019e+00
#> [1951,] -3.3576091361 -5.6369658639 -7.315150e+00
#> [1952,] -0.4137668087 -2.2786480519 -1.780513e+00
#> [1953,]  0.7298750784  1.4660140293  1.723716e+00
#> [1954,] -0.1138677108 -0.4467154912 -3.898991e-01
#> [1955,]  0.2633241419 -0.4645117814  7.057524e-02
#> [1956,]  0.5244480553  0.8480175867  1.124590e+00
#> [1957,] -2.4522454212 -2.9820367763 -4.712806e+00
#> [1958,] -1.7859095191 -3.2365643227 -4.023150e+00
#> [1959,] -0.0411773724 -2.2065019383 -1.275864e+00
#> [1960,] -0.1590119852 -1.0452236928 -7.783401e-01
#> [1961,]  1.3747287361  2.8349701044  3.287548e+00
#> [1962,] -0.4763303624  0.7124045974 -1.986195e-01
#> [1963,]  1.9943459138  3.5487578293  4.456321e+00
#> [1964,]  0.4712676684  1.6791587681  1.519524e+00
#> [1965,]  0.6369907302  1.2943887628  1.512646e+00
#> [1966,]  2.5423911759  3.9130494760  5.341889e+00
#> [1967,]  0.1585235495  0.1661412560  2.898771e-01
#> [1968,]  0.1716463043 -0.3800504748  3.127339e-03
#> [1969,] -0.5276130648 -0.3566160191 -8.558297e-01
#> [1970,]  0.9877881015  2.8214493830  2.797538e+00
#> [1971,]  0.3997287996  0.6183648959  8.416203e-01
#> [1972,] -0.6068772665 -2.0653858537 -1.902966e+00
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#> [1973,]   0.5440588020   1.0530784014   1.262845e+00
#> [1974,] -0.9933240398  -2.9879191754  -2.896825e+00
#> [1975,]   0.9149113726   1.7629247967   2.119225e+00
#> [1976,]   0.2315258522   0.8628180848   7.675359e-01
#> [1977,]   0.1550149076  -0.0575288414   1.613743e-01
#> [1978,] -0.7343162278  -1.8277384644  -1.929996e+00
#> [1979,]   3.8314642322   4.8327385021   7.459725e+00
#> [1980,]   0.0121378113  -0.7188292540  -3.837845e-01
#> [1981,]   0.1474935151   1.0041817134   7.412002e-01
#> [1982,]   1.5040384322   1.9742865833   2.971152e+00
#> [1983,] -1.2495552775  -1.8966108950  -2.610710e+00
#> [1984,]   0.4328923460   1.5341474236   1.391196e+00
#> [1985,]   0.0133157201  -0.6840956301  -3.630400e-01
#> [1986,]   2.1272253715   3.9644064352   4.852686e+00
#> [1987,]   0.0246015825   0.1636463615   1.214946e-01
#> [1988,] -0.0380600361  -0.1912654708  -1.536044e-01
#> [1989,]   0.1666531877  -0.7162272765  -1.896630e-01
#> [1990,]   0.9062610695   2.4945121430   2.514439e+00
#> [1991,]   0.4906077692   0.6286454899   9.606498e-01
#> [1992,]   0.9404492793   0.9763140445   1.714534e+00
#> [1993,] -0.2979357559  -0.0686084946  -4.095947e-01
#> [1994,]   0.4133064248   1.0712873601   1.109904e+00
#> [1995,]   0.6067274558   2.2973147025   2.031490e+00
#> [1996,] -0.6363108371  -1.2006786278  -1.459793e+00
#> [1997,]   1.6125449845   1.1218492593   2.633390e+00
#> [1998,]   2.0225499784   3.4449417106   4.433877e+00
#> [1999,]   1.4116099375   3.0452751411   3.450249e+00
#> [2000,] -1.5580240173  -3.1726270561  -3.703499e+00
#>
#> [[1]][[19]]$value[[1]]$decomposition
#> [1] "eigen"
#>
#>
#>
#> [[1]][[19]]$visible
#> [1] TRUE
#>
#>
#> [[1]][[20]]
#> [[1]][[20]]$value
#> [[1]][[20]]$value[[1]]
#> [[1]][[20]]$value[[1]]$M
#> [1] 2
#>
#> [[1]][[20]]$value[[1]]$est
```

```
#> [1] 0 0 0
#>
#> [[1]][[20]]$value[[1]]$within
#>      [,1] [,2] [,3]
#> [1,]    1    0    0
#> [2,]    0    1    0
#> [3,]    0    0    1
#>
#> [[1]][[20]]$value[[1]]$between
#>      [,1] [,2] [,3]
#> [1,]    0    0    0
#> [2,]    0    0    0
#> [3,]    0    0    0
#>
#> [[1]][[20]]$value[[1]]$total
#>      [,1] [,2] [,3]
#> [1,]    1    0    0
#> [2,]    0    1    0
#> [3,]    0    0    1
#>
#> [[1]][[20]]$value[[1]]$ariv
#> [1] NA
#>
#> [[1]][[20]]$value[[1]]$total_adj
#> [1] NA
#>
#>
#>
#> [[1]][[20]]$visible
#> [1] TRUE
#>
#>
#> [[1]][[21]]
#> [[1]][[21]]$value
#> [[1]][[21]]$value[[1]]
#>               est    se R 0.05% 0.5% 2.5% 97.5% 99.5% 99.95%
#> eta1=~y1   1.0000 NA 0   NA   NA   NA   NA   NA     NA
#> eta1=~y2   0.7039 NA 0   NA   NA   NA   NA   NA     NA
#> eta1=~y3   0.7047 NA 0   NA   NA   NA   NA   NA     NA
#> eta1=~y4   0.8566 NA 0   NA   NA   NA   NA   NA     NA
#> y1~~y1     0.0000 NA 0   NA   NA   NA   NA   NA     NA
#> y2~~y2     0.5045 NA 0   NA   NA   NA   NA   NA     NA
#> y3~~y3     0.5034 NA 0   NA   NA   NA   NA   NA     NA
#> y4~~y4     0.2662 NA 0   NA   NA   NA   NA   NA     NA
#> eta1~~eta1 1.0000 NA 0   NA   NA   NA   NA   NA     NA
```

```
#> 
#> 
#> [[1]][[21]]$visible
#> [1] TRUE
```

Environment

```
ls()

#> [1] "i"        "root"     "tex_file"
```

Class

```
#> [[1]]
#> [1] "character"
#>
#> [[2]]
#> [1] "root_criterion"
#>
#> [[3]]
#> [1] "character"
```

References

R Core Team. (2023). *R: A language and environment for statistical computing.* R Foundation for
Statistical Computing. Vienna, Austria. https://www.R-project.org/