# Circuit For Computing Error Probability of Majority Voting - Updated Draft

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**Abstract**

In this article a DC uniform circuit for computation of error probability in majority voting is constructed and thus shown to be in PH. This error probability in majority voting is nothing but the RHS of the P(good) equation published earlier as mentioned in bibliography.

## 1 Derivation of P(good) expression

In a distributed systems (e.g cloud computing environments) with 2n nodes, the leader is elected by a majority voting if it obtains $n+1$ or more votes. We would like to bound the probability that such an outcome of a majority vote is good. This is precisely the probability that atleast $n+1$ nodes have made a good decision. Assumption here is that a good majority decision by majority of the nodes with high probability also results in a good outcome in the majority voting (rather it is trivial and is accepted axiomatically without proof). Thus by probability union bound,

```
Pr(leader elected by majority voting is good) =
Pr(atleast n+1 nodes have made a good decision)

= Pr (n+1 nodes have made good decision) +
  Pr(n+2 nodes have made good decision) +
... +
  Pr(2n nodes have made good decision)
  - (0 for intersection probability)

If Pr(good decision by a node) = 0.5
(assuming a uniform distribution and thus good and bad
decisions are equally probable) then LHS of the P(Good)
equation is 0.5 and the RHS is obtained
through the series distribution as,
```

$$= 2nC_{(n+1)} * (0.5)^{(n+1)} * (0.5)^{(n-1)} + ... + 2nC_{2n}(0.5)^{(2n)} \quad (1)$$

$$= (0.25)^n[2nC_{(n+1)} + 2nC_{(n+2)} + ... + 2nC_{(2n)}] \quad (2)$$

$$= [(2n)!/(4^n)] * [1/(n+1)!(n-1)! + 1/(n-2)!(n+2)! + ... + 1/(2n)!] \quad (3)$$

This series tends to 0.5 which can be confirmed by simple convergence test. The fraction $[nthterm - (n-1)thterm]/n$ tends to zero as n tends to infinity. Closed formula for summation of binomial coefficients in the summation above requires Hypergeometric functions as follows:

$$\sum_{i=0}^{m} mC_i = 2^m \quad (4)$$

and

$$\sum_{i=k}^{m} mC_i = 2^m - \sum_{i=0}^{k-1} mC_i \quad (5)$$

is the quantity within the parenthesis in above summation and

$$\sum_{i=0}^{k-1} mC_i \quad (6)$$

has a closed formula that can be derived using Hypergeometric functions (Gosper Algorithm, Zeilberger algorithm, Wilf-Zeilberger pairs etc.,) which is a different field by itself and is non-trivial and thus LHS can be computed and substituted in the above parenthesis with binomial coefficients.

Output of a computer program which computes the above is in appendix ($http://sourceforge.net/p/asfer/code/HEAD/tree/cpp-src/miscellaneous/pgood.cpp$). For odd number of voters, probability can be analogously derived by rounding off to nearest integer to get past the halfway point. For odd number of the voter population, say m, the halfway point is $ceiling(m/2)$. Let $x = ceiling(m/2)$. Thus above series becomes,

$$= mC_{(x+1]} * (0.5)^m + mC_{(x+2)} * (0.5)^m + ... + mC_m * (0.5)^m \quad (7)$$

$$= (0.5)^m * [mC_{(x)} + mC_{(x+1)} + ... + mC_m] \quad (8)$$

$$= m!/(2^m)[1/x!(m-x)! + ... + 1/m!] \quad (9)$$

Assumption here is that a good majority decision with high probability also results in a good outcome in the majority voting (rather it is trivial because a good decision implies good judgement of the majority choice by the voters which is the outcome and is stated without proof).

## 2 A simple majority voting example with 5 voters

Following are the 32 possible voting patterns in terms of nature of individual decision for 5 voters to elect a leader (0 means voter has made bad decision and 1 means voter has made good decision):

```
00000, 10000
00001, 10001
00010, 10010
00011, 10011
00100, 10100
```

```
00101, 10101
00110, 10110
00111, 10111
01000, 11000
01001, 11001
01010, 11010
01011, 11011
01100, 11100
01101, 11101
01110, 11110
01111, 11111
```

From the above the probability that atleast $celing(5/2)$ (or more than or equal to 3 in above example) voters have made a good decision, can be computed easily by glancing. Out of 32 patterns, 16 have 3 or more 1s ( good decisions). Thus the probability that elected leader is good is 16/32. This can be derived from above series also as,

```
= 1/32 [5C3 + 5C4 + 5C5]
= 16/32 = 0.5
```

# 3 Circuit for computing P(Good) error probability from voter decision patterns

Complexity of computing above series in RHS of P(Good) equation is exponential in n because of computation of factorials (can be approximated by Stirling's formula). P(Good) series implies that any leader election algorithm that involves majority voting (under zero bias space where $Pr[decision = 1]$ - $Pr[decision = 0] = 0$) is no better than a (pseudo)random choice. Translating P(good) series into circuit requires computation of majority function on $2^{2n}$ possible inputs corresponding to all possible voting patters by the $2n$ voters.

Following is the algorithm for drawing the above circuit:

1. Have $2^{2n}$ majority circuits. Each of these majority circuit takes as input one voting decision bit pattern each with each bit as a decision(good or bad) input for corresponding voter(as explained in example above). Majority function can be computed in polynomial size by sorting networks (Ajtai et al) or through non-uniform NC1 circuit (Barrington) or Valiant's non-constructive majority circuit of size $n^{5.3}$. Thus each majority circuit computes the majority of the voting pattern and outputs 1 or 0 depending on which of the bits are in majority (1 means majority decision is good and 0 means bad for that voting pattern). Thus $2^{2n}$ majority circuits compute the majority of each of the $2^{2n}$ voting bit patterns and output 0 or 1.

2. An addition circuit then adds up the $2^{2n}$ bits output by all of the above majority circuits. This addition circuit has exponential fan-in and thus exponential in n and thus NC1 cannot compute this addition which requires bounded fanin ,logdepth and polysize circuit. Exponential sized circuits are in DC-uniform family characterized by Polynomial Hierarchy(PH) which is defined as circuit having AND,OR and NOT gates and size $2^{2n}$ with unbounded fanin.

3. Output of the above addition circuit is the numerator of the P(Good) fraction. Thus a division circuit is needed to divide this numerator by denominator which is $2^{2n}$. Division can be performed in TC0. Thus summing up we have a 3 step circuit $(NC1 + DC - uniform + TC0)$.

Subsuming NC1 and TC0 in DC-uniform gives a DC-uniform exponential sized circuit to compute the P(Good) RHS probability.

## 4 Conclusion

Thus a series expression for the error probability in majority voting has been derived and a DC-uniform circuit has been constructed for it.

## 5 Appendix for P(Good) computation with even number voter population output by a computer program (probability is in percentage)

```
Probability of good choice for population of 0=0
prob - prevprob = 0
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2=25
prob - prevprob = 0.25
Convergence test: (sum - prevsum)/prevsum = inf
Probability of good choice for population of 4=31.25
prob - prevprob = 0.0625
Convergence test: (sum - prevsum)/prevsum = 0.25
Probability of good choice for population of 6=34.375
prob - prevprob = 0.03125
Convergence test: (sum - prevsum)/prevsum = 0.1
Probability of good choice for population of 8=36.3281
prob - prevprob = 0.0195312
Convergence test: (sum - prevsum)/prevsum = 0.0568182
Probability of good choice for population of 10=37.6953
prob - prevprob = 0.0136719
Convergence test: (sum - prevsum)/prevsum = 0.0376344
Probability of good choice for population of 12=38.7207
prob - prevprob = 0.0102539
Convergence test: (sum - prevsum)/prevsum = 0.0272021
Probability of good choice for population of 14=39.5264
prob - prevprob = 0.00805664
Convergence test: (sum - prevsum)/prevsum = 0.0208071
Probability of good choice for population of 16=40.181
prob - prevprob = 0.00654602
Convergence test: (sum - prevsum)/prevsum = 0.0165611
Probability of good choice for population of 18=40.7265
prob - prevprob = 0.00545502
Convergence test: (sum - prevsum)/prevsum = 0.0135761
Probability of good choice for population of 20=41.1901
prob - prevprob = 0.00463676
Convergence test: (sum - prevsum)/prevsum = 0.0113851
Probability of good choice for population of 22=41.5906
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```
prob - prevprob = 0.00400448
Convergence test: (sum - prevsum)/prevsum = 0.00972193
Probability of good choice for population of 24=41.941
prob - prevprob = 0.00350392
Convergence test: (sum - prevsum)/prevsum = 0.00842479
Probability of good choice for population of 26=42.2509
prob - prevprob = 0.00309962
Convergence test: (sum - prevsum)/prevsum = 0.00739043
Probability of good choice for population of 28=42.5277
prob - prevprob = 0.00276752
Convergence test: (sum - prevsum)/prevsum = 0.00655019
Probability of good choice for population of 30=42.7768
prob - prevprob = 0.00249077
Convergence test: (sum - prevsum)/prevsum = 0.00585681
Probability of good choice for population of 32=43.0025
prob - prevprob = 0.00225726
Convergence test: (sum - prevsum)/prevsum = 0.00527683
Probability of good choice for population of 34=43.2083
prob - prevprob = 0.00205809
Convergence test: (sum - prevsum)/prevsum = 0.00478597
Probability of good choice for population of 36=43.397
prob - prevprob = 0.00188658
Convergence test: (sum - prevsum)/prevsum = 0.00436624
Probability of good choice for population of 38=43.5707
prob - prevprob = 0.00173764
Convergence test: (sum - prevsum)/prevsum = 0.00400406
Probability of good choice for population of 40=43.7315
prob - prevprob = 0.00160732
Convergence test: (sum - prevsum)/prevsum = 0.00368898
Probability of good choice for population of 42=43.8807
prob - prevprob = 0.00149251
Convergence test: (sum - prevsum)/prevsum = 0.00341289
Probability of good choice for population of 44=44.0198
prob - prevprob = 0.00139075
Convergence test: (sum - prevsum)/prevsum = 0.00316938
Probability of good choice for population of 46=44.1498
prob - prevprob = 0.00130005
Convergence test: (sum - prevsum)/prevsum = 0.00295332
Probability of good choice for population of 48=44.2717
prob - prevprob = 0.00121879
Convergence test: (sum - prevsum)/prevsum = 0.00276058
Probability of good choice for population of 50=44.3862
prob - prevprob = 0.00114567
Convergence test: (sum - prevsum)/prevsum = 0.00258781
Probability of good choice for population of 52=44.4942
prob - prevprob = 0.00107957
Convergence test: (sum - prevsum)/prevsum = 0.00243222
Probability of good choice for population of 54=44.5962
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prob - prevprob = 0.00101959
Convergence test: (sum - prevsum)/prevsum = 0.00229152
Probability of good choice for population of 56=44.6927
prob - prevprob = 0.000964972
Convergence test: (sum - prevsum)/prevsum = 0.0021638
Probability of good choice for population of 58=44.7842
prob - prevprob = 0.00091506
Convergence test: (sum - prevsum)/prevsum = 0.00204745
Probability of good choice for population of 60=44.8711
prob - prevprob = 0.000869307
Convergence test: (sum - prevsum)/prevsum = 0.0019411
Probability of good choice for population of 62=44.9538
prob - prevprob = 0.000827243
Convergence test: (sum - prevsum)/prevsum = 0.0018436
Probability of good choice for population of 64=45.0327
prob - prevprob = 0.000788466
Convergence test: (sum - prevsum)/prevsum = 0.00175395
Probability of good choice for population of 66=45.1079
prob - prevprob = 0.000752627
Convergence test: (sum - prevsum)/prevsum = 0.00167129
Probability of good choice for population of 68=45.1799
prob - prevprob = 0.000719423
Convergence test: (sum - prevsum)/prevsum = 0.00159489
Probability of good choice for population of 70=45.2487
prob - prevprob = 0.00068859
Convergence test: (sum - prevsum)/prevsum = 0.00152411
Probability of good choice for population of 72=45.3147
prob - prevprob = 0.000659899
Convergence test: (sum - prevsum)/prevsum = 0.00145838
Probability of good choice for population of 74=45.378
prob - prevprob = 0.000633146
Convergence test: (sum - prevsum)/prevsum = 0.00139722
Probability of good choice for population of 76=45.4388
prob - prevprob = 0.000608154
Convergence test: (sum - prevsum)/prevsum = 0.00134019
Probability of good choice for population of 78=45.4973
prob - prevprob = 0.000584763
Convergence test: (sum - prevsum)/prevsum = 0.00128692
Probability of good choice for population of 80=45.5536
prob - prevprob = 0.000562835
Convergence test: (sum - prevsum)/prevsum = 0.00123707
Probability of good choice for population of 82=45.6078
prob - prevprob = 0.000542243
Convergence test: (sum - prevsum)/prevsum = 0.00119034
Probability of good choice for population of 84=45.6601
prob - prevprob = 0.000522877
Convergence test: (sum - prevsum)/prevsum = 0.00114646
Probability of good choice for population of 86=45.7106
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prob - prevprob = 0.000504637
Convergence test: (sum - prevsum)/prevsum = 0.0011052
Probability of good choice for population of 88=45.7593
prob - prevprob = 0.000487434
Convergence test: (sum - prevsum)/prevsum = 0.00106635
Probability of good choice for population of 90=45.8064
prob - prevprob = 0.000471186
Convergence test: (sum - prevsum)/prevsum = 0.00102971
Probability of good choice for population of 92=45.852
prob - prevprob = 0.000455821
Convergence test: (sum - prevsum)/prevsum = 0.000995103
Probability of good choice for population of 94=45.8962
prob - prevprob = 0.000441274
Convergence test: (sum - prevsum)/prevsum = 0.000962387
Probability of good choice for population of 96=45.9389
prob - prevprob = 0.000427484
Convergence test: (sum - prevsum)/prevsum = 0.000931416
Probability of good choice for population of 98=45.9803
prob - prevprob = 0.000414398
Convergence test: (sum - prevsum)/prevsum = 0.000902063
Probability of good choice for population of 100=46.0205
prob - prevprob = 0.000401966
Convergence test: (sum - prevsum)/prevsum = 0.000874212
Probability of good choice for population of 102=46.0596
prob - prevprob = 0.000390143
Convergence test: (sum - prevsum)/prevsum = 0.000847759
Probability of good choice for population of 104=46.0974
prob - prevprob = 0.000378889
Convergence test: (sum - prevsum)/prevsum = 0.000822607
Probability of good choice for population of 106=46.1343
prob - prevprob = 0.000368166
Convergence test: (sum - prevsum)/prevsum = 0.000798669
Probability of good choice for population of 108=46.1701
prob - prevprob = 0.000357939
Convergence test: (sum - prevsum)/prevsum = 0.000775864
Probability of good choice for population of 110=46.2049
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Probability of good choice for population of 112=46.2388
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Convergence test: (sum - prevsum)/prevsum = 0.000733366
Probability of good choice for population of 114=46.2717
prob - prevprob = 0.000329934
Convergence test: (sum - prevsum)/prevsum = 0.000713544
Probability of good choice for population of 116=46.3039
prob - prevprob = 0.000321401
Convergence test: (sum - prevsum)/prevsum = 0.000694595
Probability of good choice for population of 118=46.3352
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prob - prevprob = 0.00031323
Convergence test: (sum - prevsum)/prevsum = 0.000676465
Probability of good choice for population of 120=46.3658
prob - prevprob = 0.000305399
Convergence test: (sum - prevsum)/prevsum = 0.000659108
Probability of good choice for population of 122=46.3955
prob - prevprob = 0.000297889
Convergence test: (sum - prevsum)/prevsum = 0.000642477
Probability of good choice for population of 124=46.4246
prob - prevprob = 0.000290682
Convergence test: (sum - prevsum)/prevsum = 0.000626531
Probability of good choice for population of 126=46.453
prob - prevprob = 0.000283761
Convergence test: (sum - prevsum)/prevsum = 0.00061123
Probability of good choice for population of 128=46.4807
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Convergence test: (sum - prevsum)/prevsum = 0.00059654
Probability of good choice for population of 130=46.5078
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Convergence test: (sum - prevsum)/prevsum = 0.000476842
Probability of good choice for population of 150=46.7481
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prob - prevprob = 0.00021825
Convergence test: (sum - prevsum)/prevsum = 0.000467082
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Probability of good choice for population of 180=47.0306
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Convergence test: (sum - prevsum)/prevsum = 0.00035285
Probability of good choice for population of 182=47.0469
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Probability of good choice for population of 184=47.063
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Convergence test: (sum - prevsum)/prevsum = 0.000341137
Probability of good choice for population of 186=47.0787
prob - prevprob = 0.000157906
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Convergence test: (sum - prevsum)/prevsum = 0.000314517
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Probability of good choice for population of 202=47.1965
prob - prevprob = 0.000139476
Convergence test: (sum - prevsum)/prevsum = 0.00029561
Probability of good choice for population of 204=47.2103
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Convergence test: (sum - prevsum)/prevsum = 0.000291177
Probability of good choice for population of 206=47.2238
prob - prevprob = 0.000135424
Convergence test: (sum - prevsum)/prevsum = 0.000286853
Probability of good choice for population of 208=47.2372
prob - prevprob = 0.000133471
Convergence test: (sum - prevsum)/prevsum = 0.000282634
Probability of good choice for population of 210=47.2503
prob - prevprob = 0.000131564
Convergence test: (sum - prevsum)/prevsum = 0.000278518
Probability of good choice for population of 212=47.2633
prob - prevprob = 0.000129702
Convergence test: (sum - prevsum)/prevsum = 0.0002745
Probability of good choice for population of 214=47.2761
```

```
prob - prevprob = 0.000127884
Convergence test: (sum - prevsum)/prevsum = 0.000270578
Probability of good choice for population of 216=47.2887
prob - prevprob = 0.000126108
Convergence test: (sum - prevsum)/prevsum = 0.000266748
Probability of good choice for population of 218=47.3011
prob - prevprob = 0.000124372
Convergence test: (sum - prevsum)/prevsum = 0.000263007
Probability of good choice for population of 220=47.3134
prob - prevprob = 0.000122676
Convergence test: (sum - prevsum)/prevsum = 0.000259352
Probability of good choice for population of 222=47.3255
prob - prevprob = 0.000121019
Convergence test: (sum - prevsum)/prevsum = 0.000255781
Probability of good choice for population of 224=47.3374
prob - prevprob = 0.000119398
Convergence test: (sum - prevsum)/prevsum = 0.000252291
Probability of good choice for population of 226=47.3492
prob - prevprob = 0.000117813
Convergence test: (sum - prevsum)/prevsum = 0.000248879
Probability of good choice for population of 228=47.3608
prob - prevprob = 0.000116263
Convergence test: (sum - prevsum)/prevsum = 0.000245543
Probability of good choice for population of 230=47.3723
prob - prevprob = 0.000114746
Convergence test: (sum - prevsum)/prevsum = 0.000242281
Probability of good choice for population of 232=47.3836
prob - prevprob = 0.000113262
Convergence test: (sum - prevsum)/prevsum = 0.00023909
Probability of good choice for population of 234=47.3948
prob - prevprob = 0.00011181
Convergence test: (sum - prevsum)/prevsum = 0.000235968
Probability of good choice for population of 236=47.4059
prob - prevprob = 0.000110389
Convergence test: (sum - prevsum)/prevsum = 0.000232914
Probability of good choice for population of 238=47.4168
prob - prevprob = 0.000108998
Convergence test: (sum - prevsum)/prevsum = 0.000229924
Probability of good choice for population of 240=47.4275
prob - prevprob = 0.000107635
Convergence test: (sum - prevsum)/prevsum = 0.000226998
Probability of good choice for population of 242=47.4381
prob - prevprob = 0.000106301
Convergence test: (sum - prevsum)/prevsum = 0.000224133
Probability of good choice for population of 244=47.4486
prob - prevprob = 0.000104994
Convergence test: (sum - prevsum)/prevsum = 0.000221328
Probability of good choice for population of 246=47.459
```

```
prob - prevprob = 0.000103713
Convergence test: (sum - prevsum)/prevsum = 0.00021858
Probability of good choice for population of 248=47.4693
prob - prevprob = 0.000102459
Convergence test: (sum - prevsum)/prevsum = 0.000215889
Probability of good choice for population of 250=47.4794
prob - prevprob = 0.000101229
Convergence test: (sum - prevsum)/prevsum = 0.000213252
Probability of good choice for population of 252=47.4894
prob - prevprob = 0.000100024
Convergence test: (sum - prevsum)/prevsum = 0.000210669
Probability of good choice for population of 254=47.4993
prob - prevprob = 9.88428e-05
Convergence test: (sum - prevsum)/prevsum = 0.000208137
Probability of good choice for population of 256=47.509
prob - prevprob = 9.76845e-05
Convergence test: (sum - prevsum)/prevsum = 0.000205655
Probability of good choice for population of 258=47.5187
prob - prevprob = 9.65487e-05
Convergence test: (sum - prevsum)/prevsum = 0.000203222
Probability of good choice for population of 260=47.5282
prob - prevprob = 9.54346e-05
Convergence test: (sum - prevsum)/prevsum = 0.000200836
Probability of good choice for population of 262=47.5377
prob - prevprob = 9.43419e-05
Convergence test: (sum - prevsum)/prevsum = 0.000198496
Probability of good choice for population of 264=47.547
prob - prevprob = 9.32698e-05
Convergence test: (sum - prevsum)/prevsum = 0.000196202
Probability of good choice for population of 266=47.5562
prob - prevprob = 9.22179e-05
Convergence test: (sum - prevsum)/prevsum = 0.000193951
Probability of good choice for population of 268=47.5653
prob - prevprob = 9.11856e-05
Convergence test: (sum - prevsum)/prevsum = 0.000191743
Probability of good choice for population of 270=47.5744
prob - prevprob = 9.01724e-05
Convergence test: (sum - prevsum)/prevsum = 0.000189576
Probability of good choice for population of 272=47.5833
prob - prevprob = 8.91779e-05
Convergence test: (sum - prevsum)/prevsum = 0.000187449
Probability of good choice for population of 274=47.5921
prob - prevprob = 8.82015e-05
Convergence test: (sum - prevsum)/prevsum = 0.000185362
Probability of good choice for population of 276=47.6008
prob - prevprob = 8.72428e-05
Convergence test: (sum - prevsum)/prevsum = 0.000183314
Probability of good choice for population of 278=47.6095
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prob - prevprob = 8.63013e-05
Convergence test: (sum - prevsum)/prevsum = 0.000181302
Probability of good choice for population of 280=47.618
prob - prevprob = 8.53766e-05
Convergence test: (sum - prevsum)/prevsum = 0.000179327
Probability of good choice for population of 282=47.6264
prob - prevprob = 8.44684e-05
Convergence test: (sum - prevsum)/prevsum = 0.000177388
Probability of good choice for population of 284=47.6348
prob - prevprob = 8.35761e-05
Convergence test: (sum - prevsum)/prevsum = 0.000175483
Probability of good choice for population of 286=47.6431
prob - prevprob = 8.26994e-05
Convergence test: (sum - prevsum)/prevsum = 0.000173611
Probability of good choice for population of 288=47.6512
prob - prevprob = 8.1838e-05
Convergence test: (sum - prevsum)/prevsum = 0.000171773
Probability of good choice for population of 290=47.6593
prob - prevprob = 8.09914e-05
Convergence test: (sum - prevsum)/prevsum = 0.000169967
Probability of good choice for population of 292=47.6674
prob - prevprob = 8.01593e-05
Convergence test: (sum - prevsum)/prevsum = 0.000168192
Probability of good choice for population of 294=47.6753
prob - prevprob = 7.93413e-05
Convergence test: (sum - prevsum)/prevsum = 0.000166448
Probability of good choice for population of 296=47.6832
prob - prevprob = 7.85372e-05
Convergence test: (sum - prevsum)/prevsum = 0.000164734
Probability of good choice for population of 298=47.6909
prob - prevprob = 7.77466e-05
Convergence test: (sum - prevsum)/prevsum = 0.000163048
Probability of good choice for population of 300=47.6986
prob - prevprob = 7.69691e-05
Convergence test: (sum - prevsum)/prevsum = 0.000161391
Probability of good choice for population of 302=47.7062
prob - prevprob = 7.62045e-05
Convergence test: (sum - prevsum)/prevsum = 0.000159762
Probability of good choice for population of 304=47.7138
prob - prevprob = 7.54525e-05
Convergence test: (sum - prevsum)/prevsum = 0.000158161
Probability of good choice for population of 306=47.7213
prob - prevprob = 7.47127e-05
Convergence test: (sum - prevsum)/prevsum = 0.000156585
Probability of good choice for population of 308=47.7287
prob - prevprob = 7.3985e-05
Convergence test: (sum - prevsum)/prevsum = 0.000155036
Probability of good choice for population of 310=47.736
```

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prob - prevprob = 7.3269e-05
Convergence test: (sum - prevsum)/prevsum = 0.000153512
Probability of good choice for population of 312=47.7432
prob - prevprob = 7.25645e-05
Convergence test: (sum - prevsum)/prevsum = 0.000152012
Probability of good choice for population of 314=47.7504
prob - prevprob = 7.18712e-05
Convergence test: (sum - prevsum)/prevsum = 0.000150537
Probability of good choice for population of 316=47.7575
prob - prevprob = 7.11889e-05
Convergence test: (sum - prevsum)/prevsum = 0.000149085
Probability of good choice for population of 318=47.7646
prob - prevprob = 7.05173e-05
Convergence test: (sum - prevsum)/prevsum = 0.000147657
Probability of good choice for population of 320=47.7716
prob - prevprob = 6.98562e-05
Convergence test: (sum - prevsum)/prevsum = 0.000146251
Probability of good choice for population of 322=47.7785
prob - prevprob = 6.92054e-05
Convergence test: (sum - prevsum)/prevsum = 0.000144867
Probability of good choice for population of 324=47.7854
prob - prevprob = 6.85646e-05
Convergence test: (sum - prevsum)/prevsum = 0.000143505
Probability of good choice for population of 326=47.7922
prob - prevprob = 6.79336e-05
Convergence test: (sum - prevsum)/prevsum = 0.000142164
Probability of good choice for population of 328=47.7989
prob - prevprob = 6.73123e-05
Convergence test: (sum - prevsum)/prevsum = 0.000140844
Probability of good choice for population of 330=47.8056
prob - prevprob = 6.67004e-05
Convergence test: (sum - prevsum)/prevsum = 0.000139544
Probability of good choice for population of 332=47.8122
prob - prevprob = 6.60976e-05
Convergence test: (sum - prevsum)/prevsum = 0.000138264
Probability of good choice for population of 334=47.8187
prob - prevprob = 6.5504e-05
Convergence test: (sum - prevsum)/prevsum = 0.000137003
Probability of good choice for population of 336=47.8252
prob - prevprob = 6.49191e-05
Convergence test: (sum - prevsum)/prevsum = 0.000135761
Probability of good choice for population of 338=47.8316
prob - prevprob = 6.43429e-05
Convergence test: (sum - prevsum)/prevsum = 0.000134538
Probability of good choice for population of 340=47.838
prob - prevprob = 6.37752e-05
Convergence test: (sum - prevsum)/prevsum = 0.000133333
Probability of good choice for population of 342=47.8443
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prob - prevprob = 6.32157e-05
Convergence test: (sum - prevsum)/prevsum = 0.000132145
Probability of good choice for population of 344=47.8506
prob - prevprob = 6.26644e-05
Convergence test: (sum - prevsum)/prevsum = 0.000130976
Probability of good choice for population of 346=47.8568
prob - prevprob = 6.21211e-05
Convergence test: (sum - prevsum)/prevsum = 0.000129823
Probability of good choice for population of 348=47.863
prob - prevprob = 6.15856e-05
Convergence test: (sum - prevsum)/prevsum = 0.000128687
Probability of good choice for population of 350=47.8691
prob - prevprob = 6.10577e-05
Convergence test: (sum - prevsum)/prevsum = 0.000127568
Probability of good choice for population of 352=47.8751
prob - prevprob = 6.05373e-05
Convergence test: (sum - prevsum)/prevsum = 0.000126464
Probability of good choice for population of 354=47.8811
prob - prevprob = 6.00243e-05
Convergence test: (sum - prevsum)/prevsum = 0.000125377
Probability of good choice for population of 356=47.8871
prob - prevprob = 5.95185e-05
Convergence test: (sum - prevsum)/prevsum = 0.000124305
Probability of good choice for population of 358=47.893
prob - prevprob = 5.90197e-05
Convergence test: (sum - prevsum)/prevsum = 0.000123248
Probability of good choice for population of 360=47.8988
prob - prevprob = 5.85279e-05
Convergence test: (sum - prevsum)/prevsum = 0.000122206
Probability of good choice for population of 362=47.9047
prob - prevprob = 5.80428e-05
Convergence test: (sum - prevsum)/prevsum = 0.000121178
Probability of good choice for population of 364=47.9104
prob - prevprob = 5.75645e-05
Convergence test: (sum - prevsum)/prevsum = 0.000120165
Probability of good choice for population of 366=47.9161
prob - prevprob = 5.70926e-05
Convergence test: (sum - prevsum)/prevsum = 0.000119165
Probability of good choice for population of 368=47.9218
prob - prevprob = 5.66272e-05
Convergence test: (sum - prevsum)/prevsum = 0.00011818
Probability of good choice for population of 370=47.9274
prob - prevprob = 5.61681e-05
Convergence test: (sum - prevsum)/prevsum = 0.000117208
Probability of good choice for population of 372=47.933
prob - prevprob = 5.57151e-05
Convergence test: (sum - prevsum)/prevsum = 0.000116249
Probability of good choice for population of 374=47.9385
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prob - prevprob = 5.52682e-05
Convergence test: (sum - prevsum)/prevsum = 0.000115303
Probability of good choice for population of 376=47.944
prob - prevprob = 5.48272e-05
Convergence test: (sum - prevsum)/prevsum = 0.00011437
Probability of good choice for population of 378=47.9494
prob - prevprob = 5.43921e-05
Convergence test: (sum - prevsum)/prevsum = 0.000113449
Probability of good choice for population of 380=47.9548
prob - prevprob = 5.39627e-05
Convergence test: (sum - prevsum)/prevsum = 0.000112541
Probability of good choice for population of 382=47.9602
prob - prevprob = 5.35389e-05
Convergence test: (sum - prevsum)/prevsum = 0.000111644
Probability of good choice for population of 384=47.9655
prob - prevprob = 5.31206e-05
Convergence test: (sum - prevsum)/prevsum = 0.00011076
Probability of good choice for population of 386=47.9708
prob - prevprob = 5.27077e-05
Convergence test: (sum - prevsum)/prevsum = 0.000109887
Probability of good choice for population of 388=47.976
prob - prevprob = 5.23002e-05
Convergence test: (sum - prevsum)/prevsum = 0.000109025
Probability of good choice for population of 390=47.9812
prob - prevprob = 5.18979e-05
Convergence test: (sum - prevsum)/prevsum = 0.000108175
Probability of good choice for population of 392=47.9863
prob - prevprob = 5.15007e-05
Convergence test: (sum - prevsum)/prevsum = 0.000107335
Probability of good choice for population of 394=47.9914
prob - prevprob = 5.11086e-05
Convergence test: (sum - prevsum)/prevsum = 0.000106507
Probability of good choice for population of 396=47.9965
prob - prevprob = 5.07214e-05
Convergence test: (sum - prevsum)/prevsum = 0.000105688
Probability of good choice for population of 398=48.0015
prob - prevprob = 5.03391e-05
Convergence test: (sum - prevsum)/prevsum = 0.000104881
Probability of good choice for population of 400=48.0065
prob - prevprob = 4.99615e-05
Convergence test: (sum - prevsum)/prevsum = 0.000104083
Probability of good choice for population of 402=48.0115
prob - prevprob = 4.95887e-05
Convergence test: (sum - prevsum)/prevsum = 0.000103296
Probability of good choice for population of 404=48.0164
prob - prevprob = 4.92205e-05
Convergence test: (sum - prevsum)/prevsum = 0.000102518
Probability of good choice for population of 406=48.0213
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prob - prevprob = 4.88568e-05
Convergence test: (sum - prevsum)/prevsum = 0.00010175
Probability of good choice for population of 408=48.0262
prob - prevprob = 4.84975e-05
Convergence test: (sum - prevsum)/prevsum = 0.000100992
Probability of good choice for population of 410=48.031
prob - prevprob = 4.81427e-05
Convergence test: (sum - prevsum)/prevsum = 0.000100243
Probability of good choice for population of 412=48.0357
prob - prevprob = 4.77921e-05
Convergence test: (sum - prevsum)/prevsum = 9.95027e-05
Probability of good choice for population of 414=48.0405
prob - prevprob = 4.74458e-05
Convergence test: (sum - prevsum)/prevsum = 9.87718e-05
Probability of good choice for population of 416=48.0452
prob - prevprob = 4.71036e-05
Convergence test: (sum - prevsum)/prevsum = 9.80498e-05
Probability of good choice for population of 418=48.0499
prob - prevprob = 4.67656e-05
Convergence test: (sum - prevsum)/prevsum = 9.73366e-05
Probability of good choice for population of 420=48.0545
prob - prevprob = 4.64315e-05
Convergence test: (sum - prevsum)/prevsum = 9.66319e-05
Probability of good choice for population of 422=48.0591
prob - prevprob = 4.61014e-05
Convergence test: (sum - prevsum)/prevsum = 9.59357e-05
Probability of good choice for population of 424=48.0637
prob - prevprob = 4.57752e-05
Convergence test: (sum - prevsum)/prevsum = 9.52478e-05
Probability of good choice for population of 426=48.0683
prob - prevprob = 4.54529e-05
Convergence test: (sum - prevsum)/prevsum = 9.4568e-05
Probability of good choice for population of 428=48.0728
prob - prevprob = 4.51343e-05
Convergence test: (sum - prevsum)/prevsum = 9.38963e-05
Probability of good choice for population of 430=48.0772
prob - prevprob = 4.48194e-05
Convergence test: (sum - prevsum)/prevsum = 9.32324e-05
Probability of good choice for population of 432=48.0817
prob - prevprob = 4.45082e-05
Convergence test: (sum - prevsum)/prevsum = 9.25763e-05
Probability of good choice for population of 434=48.0861
prob - prevprob = 4.42005e-05
Convergence test: (sum - prevsum)/prevsum = 9.19279e-05
Probability of good choice for population of 436=48.0905
prob - prevprob = 4.38964e-05
Convergence test: (sum - prevsum)/prevsum = 9.1287e-05
Probability of good choice for population of 438=48.0949
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prob - prevprob = 4.35957e-05
Convergence test: (sum - prevsum)/prevsum = 9.06534e-05
Probability of good choice for population of 440=48.0992
prob - prevprob = 4.32985e-05
Convergence test: (sum - prevsum)/prevsum = 9.00272e-05
Probability of good choice for population of 442=48.1035
prob - prevprob = 4.30046e-05
Convergence test: (sum - prevsum)/prevsum = 8.94081e-05
Probability of good choice for population of 444=48.1078
prob - prevprob = 4.2714e-05
Convergence test: (sum - prevsum)/prevsum = 8.87961e-05
Probability of good choice for population of 446=48.112
prob - prevprob = 4.24267e-05
Convergence test: (sum - prevsum)/prevsum = 8.81909e-05
Probability of good choice for population of 448=48.1162
prob - prevprob = 4.21426e-05
Convergence test: (sum - prevsum)/prevsum = 8.75926e-05
Probability of good choice for population of 450=48.1204
prob - prevprob = 4.18616e-05
Convergence test: (sum - prevsum)/prevsum = 8.70011e-05
Probability of good choice for population of 452=48.1246
prob - prevprob = 4.15838e-05
Convergence test: (sum - prevsum)/prevsum = 8.64161e-05
Probability of good choice for population of 454=48.1287
prob - prevprob = 4.1309e-05
Convergence test: (sum - prevsum)/prevsum = 8.58377e-05
Probability of good choice for population of 456=48.1328
prob - prevprob = 4.10372e-05
Convergence test: (sum - prevsum)/prevsum = 8.52656e-05
Probability of good choice for population of 458=48.1369
prob - prevprob = 4.07684e-05
Convergence test: (sum - prevsum)/prevsum = 8.46999e-05
Probability of good choice for population of 460=48.1409
prob - prevprob = 4.05026e-05
Convergence test: (sum - prevsum)/prevsum = 8.41404e-05
Probability of good choice for population of 462=48.145
prob - prevprob = 4.02396e-05
Convergence test: (sum - prevsum)/prevsum = 8.3587e-05
Probability of good choice for population of 464=48.149
prob - prevprob = 3.99794e-05
Convergence test: (sum - prevsum)/prevsum = 8.30396e-05
Probability of good choice for population of 466=48.1529
prob - prevprob = 3.9722e-05
Convergence test: (sum - prevsum)/prevsum = 8.24982e-05
Probability of good choice for population of 468=48.1569
prob - prevprob = 3.94674e-05
Convergence test: (sum - prevsum)/prevsum = 8.19626e-05
Probability of good choice for population of 470=48.1608
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prob - prevprob = 3.92155e-05
Convergence test: (sum - prevsum)/prevsum = 8.14327e-05
Probability of good choice for population of 472=48.1647
prob - prevprob = 3.89662e-05
Convergence test: (sum - prevsum)/prevsum = 8.09086e-05
Probability of good choice for population of 474=48.1686
prob - prevprob = 3.87196e-05
Convergence test: (sum - prevsum)/prevsum = 8.039e-05
Probability of good choice for population of 476=48.1724
prob - prevprob = 3.84756e-05
Convergence test: (sum - prevsum)/prevsum = 7.98769e-05
Probability of good choice for population of 478=48.1762
prob - prevprob = 3.82341e-05
Convergence test: (sum - prevsum)/prevsum = 7.93692e-05
Probability of good choice for population of 480=48.18
prob - prevprob = 3.79951e-05
Convergence test: (sum - prevsum)/prevsum = 7.88669e-05
Probability of good choice for population of 482=48.1838
prob - prevprob = 3.77586e-05
Convergence test: (sum - prevsum)/prevsum = 7.83699e-05
Probability of good choice for population of 484=48.1876
prob - prevprob = 3.75246e-05
Convergence test: (sum - prevsum)/prevsum = 7.7878e-05
Probability of good choice for population of 486=48.1913
prob - prevprob = 3.7293e-05
Convergence test: (sum - prevsum)/prevsum = 7.73912e-05
Probability of good choice for population of 488=48.195
prob - prevprob = 3.70637e-05
Convergence test: (sum - prevsum)/prevsum = 7.69095e-05
Probability of good choice for population of 490=48.1987
prob - prevprob = 3.68368e-05
Convergence test: (sum - prevsum)/prevsum = 7.64328e-05
Probability of good choice for population of 492=48.2023
prob - prevprob = 3.66122e-05
Convergence test: (sum - prevsum)/prevsum = 7.59609e-05
Probability of good choice for population of 494=48.206
prob - prevprob = 3.63898e-05
Convergence test: (sum - prevsum)/prevsum = 7.54939e-05
Probability of good choice for population of 496=48.2096
prob - prevprob = 3.61697e-05
Convergence test: (sum - prevsum)/prevsum = 7.50316e-05
Probability of good choice for population of 498=48.2132
prob - prevprob = 3.59518e-05
Convergence test: (sum - prevsum)/prevsum = 7.4574e-05
Probability of good choice for population of 500=48.2168
prob - prevprob = 3.57361e-05
Convergence test: (sum - prevsum)/prevsum = 7.4121e-05
Probability of good choice for population of 502=48.2203
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prob - prevprob = 3.55226e-05
Convergence test: (sum - prevsum)/prevsum = 7.36726e-05
Probability of good choice for population of 504=48.2239
prob - prevprob = 3.53111e-05
Convergence test: (sum - prevsum)/prevsum = 7.32287e-05
Probability of good choice for population of 506=48.2274
prob - prevprob = 3.51018e-05
Convergence test: (sum - prevsum)/prevsum = 7.27892e-05
Probability of good choice for population of 508=48.2309
prob - prevprob = 3.48945e-05
Convergence test: (sum - prevsum)/prevsum = 7.23541e-05
Probability of good choice for population of 510=48.2343
prob - prevprob = 3.46892e-05
Convergence test: (sum - prevsum)/prevsum = 7.19233e-05
Probability of good choice for population of 512=48.2378
prob - prevprob = 3.44859e-05
Convergence test: (sum - prevsum)/prevsum = 7.14967e-05
Probability of good choice for population of 514=48.2412
prob - prevprob = 3.42847e-05
Convergence test: (sum - prevsum)/prevsum = 7.10743e-05
Probability of good choice for population of 516=48.2446
prob - prevprob = 3.40853e-05
Convergence test: (sum - prevsum)/prevsum = 7.06561e-05
Probability of good choice for population of 518=48.248
prob - prevprob = 3.38879e-05
Convergence test: (sum - prevsum)/prevsum = 7.02419e-05
Probability of good choice for population of 520=48.2514
prob - prevprob = 3.36924e-05
Convergence test: (sum - prevsum)/prevsum = 6.98318e-05
Probability of good choice for population of 522=48.2547
prob - prevprob = 3.34988e-05
Convergence test: (sum - prevsum)/prevsum = 6.94256e-05
Probability of good choice for population of 524=48.258
prob - prevprob = 3.3307e-05
Convergence test: (sum - prevsum)/prevsum = 6.90233e-05
Probability of good choice for population of 526=48.2614
prob - prevprob = 3.3117e-05
Convergence test: (sum - prevsum)/prevsum = 6.86249e-05
Probability of good choice for population of 528=48.2646
prob - prevprob = 3.29289e-05
Convergence test: (sum - prevsum)/prevsum = 6.82303e-05
Probability of good choice for population of 530=48.2679
prob - prevprob = 3.27425e-05
Convergence test: (sum - prevsum)/prevsum = 6.78395e-05
Probability of good choice for population of 532=48.2712
prob - prevprob = 3.25578e-05
Convergence test: (sum - prevsum)/prevsum = 6.74523e-05
Probability of good choice for population of 534=48.2744
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```
prob - prevprob = 3.23749e-05
Convergence test: (sum - prevsum)/prevsum = 6.70689e-05
Probability of good choice for population of 536=48.2776
prob - prevprob = 3.21937e-05
Convergence test: (sum - prevsum)/prevsum = 6.6689e-05
Probability of good choice for population of 538=48.2808
prob - prevprob = 3.20142e-05
Convergence test: (sum - prevsum)/prevsum = 6.63127e-05
Probability of good choice for population of 540=48.284
prob - prevprob = 3.18364e-05
Convergence test: (sum - prevsum)/prevsum = 6.59399e-05
Probability of good choice for population of 542=48.2872
prob - prevprob = 3.16601e-05
Convergence test: (sum - prevsum)/prevsum = 6.55706e-05
Probability of good choice for population of 544=48.2903
prob - prevprob = 3.14855e-05
Convergence test: (sum - prevsum)/prevsum = 6.52048e-05
Probability of good choice for population of 546=48.2935
prob - prevprob = 3.13125e-05
Convergence test: (sum - prevsum)/prevsum = 6.48423e-05
Probability of good choice for population of 548=48.2966
prob - prevprob = 3.11411e-05
Convergence test: (sum - prevsum)/prevsum = 6.44831e-05
Probability of good choice for population of 550=48.2997
prob - prevprob = 3.09713e-05
Convergence test: (sum - prevsum)/prevsum = 6.41272e-05
Probability of good choice for population of 552=48.3028
prob - prevprob = 3.08029e-05
Convergence test: (sum - prevsum)/prevsum = 6.37746e-05
Probability of good choice for population of 554=48.3058
prob - prevprob = 3.06361e-05
Convergence test: (sum - prevsum)/prevsum = 6.34252e-05
Probability of good choice for population of 556=48.3089
prob - prevprob = 3.04708e-05
Convergence test: (sum - prevsum)/prevsum = 6.3079e-05
Probability of good choice for population of 558=48.3119
prob - prevprob = 3.0307e-05
Convergence test: (sum - prevsum)/prevsum = 6.27359e-05
Probability of good choice for population of 560=48.3149
prob - prevprob = 3.01447e-05
Convergence test: (sum - prevsum)/prevsum = 6.23959e-05
Probability of good choice for population of 562=48.3179
prob - prevprob = 2.99837e-05
Convergence test: (sum - prevsum)/prevsum = 6.2059e-05
Probability of good choice for population of 564=48.3209
prob - prevprob = 2.98243e-05
Convergence test: (sum - prevsum)/prevsum = 6.17251e-05
Probability of good choice for population of 566=48.3239
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```
prob - prevprob = 2.96662e-05
Convergence test: (sum - prevsum)/prevsum = 6.13941e-05
Probability of good choice for population of 568=48.3268
prob - prevprob = 2.95095e-05
Convergence test: (sum - prevsum)/prevsum = 6.10661e-05
Probability of good choice for population of 570=48.3297
prob - prevprob = 2.93542e-05
Convergence test: (sum - prevsum)/prevsum = 6.0741e-05
Probability of good choice for population of 572=48.3327
prob - prevprob = 2.92002e-05
Convergence test: (sum - prevsum)/prevsum = 6.04187e-05
Probability of good choice for population of 574=48.3356
prob - prevprob = 2.90476e-05
Convergence test: (sum - prevsum)/prevsum = 6.00993e-05
Probability of good choice for population of 576=48.3385
prob - prevprob = 2.88963e-05
Convergence test: (sum - prevsum)/prevsum = 5.97827e-05
Probability of good choice for population of 578=48.3413
prob - prevprob = 2.87463e-05
Convergence test: (sum - prevsum)/prevsum = 5.94689e-05
Probability of good choice for population of 580=48.3442
prob - prevprob = 2.85976e-05
Convergence test: (sum - prevsum)/prevsum = 5.91578e-05
Probability of good choice for population of 582=48.347
prob - prevprob = 2.84502e-05
Convergence test: (sum - prevsum)/prevsum = 5.88493e-05
Probability of good choice for population of 584=48.3499
prob - prevprob = 2.83041e-05
Convergence test: (sum - prevsum)/prevsum = 5.85436e-05
Probability of good choice for population of 586=48.3527
prob - prevprob = 2.81592e-05
Convergence test: (sum - prevsum)/prevsum = 5.82405e-05
Probability of good choice for population of 588=48.3555
prob - prevprob = 2.80155e-05
Convergence test: (sum - prevsum)/prevsum = 5.79399e-05
Probability of good choice for population of 590=48.3583
prob - prevprob = 2.78731e-05
Convergence test: (sum - prevsum)/prevsum = 5.7642e-05
Probability of good choice for population of 592=48.361
prob - prevprob = 2.77318e-05
Convergence test: (sum - prevsum)/prevsum = 5.73466e-05
Probability of good choice for population of 594=48.3638
prob - prevprob = 2.75918e-05
Convergence test: (sum - prevsum)/prevsum = 5.70537e-05
Probability of good choice for population of 596=48.3666
prob - prevprob = 2.74529e-05
Convergence test: (sum - prevsum)/prevsum = 5.67633e-05
Probability of good choice for population of 598=48.3693
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prob - prevprob = 2.73151e-05
Convergence test: (sum - prevsum)/prevsum = 5.64753e-05
Probability of good choice for population of 600=48.372
prob - prevprob = 2.71786e-05
Convergence test: (sum - prevsum)/prevsum = 5.61897e-05
Probability of good choice for population of 602=48.3747
prob - prevprob = 2.70431e-05
Convergence test: (sum - prevsum)/prevsum = 5.59066e-05
Probability of good choice for population of 604=48.3774
prob - prevprob = 2.69088e-05
Convergence test: (sum - prevsum)/prevsum = 5.56258e-05
Probability of good choice for population of 606=48.3801
prob - prevprob = 2.67756e-05
Convergence test: (sum - prevsum)/prevsum = 5.53473e-05
Probability of good choice for population of 608=48.3827
prob - prevprob = 2.66435e-05
Convergence test: (sum - prevsum)/prevsum = 5.50712e-05
Probability of good choice for population of 610=48.3854
prob - prevprob = 2.65125e-05
Convergence test: (sum - prevsum)/prevsum = 5.47973e-05
Probability of good choice for population of 612=48.388
prob - prevprob = 2.63825e-05
Convergence test: (sum - prevsum)/prevsum = 5.45257e-05
Probability of good choice for population of 614=48.3907
prob - prevprob = 2.62536e-05
Convergence test: (sum - prevsum)/prevsum = 5.42564e-05
Probability of good choice for population of 616=48.3933
prob - prevprob = 2.61257e-05
Convergence test: (sum - prevsum)/prevsum = 5.39892e-05
Probability of good choice for population of 618=48.3959
prob - prevprob = 2.59989e-05
Convergence test: (sum - prevsum)/prevsum = 5.37242e-05
Probability of good choice for population of 620=48.3985
prob - prevprob = 2.58731e-05
Convergence test: (sum - prevsum)/prevsum = 5.34614e-05
Probability of good choice for population of 622=48.401
prob - prevprob = 2.57483e-05
Convergence test: (sum - prevsum)/prevsum = 5.32007e-05
Probability of good choice for population of 624=48.4036
prob - prevprob = 2.56245e-05
Convergence test: (sum - prevsum)/prevsum = 5.29421e-05
Probability of good choice for population of 626=48.4061
prob - prevprob = 2.55017e-05
Convergence test: (sum - prevsum)/prevsum = 5.26856e-05
Probability of good choice for population of 628=48.4087
prob - prevprob = 2.53799e-05
Convergence test: (sum - prevsum)/prevsum = 5.24311e-05
Probability of good choice for population of 630=48.4112
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prob - prevprob = 2.5259e-05
Convergence test: (sum - prevsum)/prevsum = 5.21787e-05
Probability of good choice for population of 632=48.4137
prob - prevprob = 2.51391e-05
Convergence test: (sum - prevsum)/prevsum = 5.19283e-05
Probability of good choice for population of 634=48.4162
prob - prevprob = 2.50202e-05
Convergence test: (sum - prevsum)/prevsum = 5.16799e-05
Probability of good choice for population of 636=48.4187
prob - prevprob = 2.49022e-05
Convergence test: (sum - prevsum)/prevsum = 5.14335e-05
Probability of good choice for population of 638=48.4212
prob - prevprob = 2.47851e-05
Convergence test: (sum - prevsum)/prevsum = 5.1189e-05
Probability of good choice for population of 640=48.4237
prob - prevprob = 2.46689e-05
Convergence test: (sum - prevsum)/prevsum = 5.09465e-05
Probability of good choice for population of 642=48.4261
prob - prevprob = 2.45536e-05
Convergence test: (sum - prevsum)/prevsum = 5.07058e-05
Probability of good choice for population of 644=48.4286
prob - prevprob = 2.44392e-05
Convergence test: (sum - prevsum)/prevsum = 5.04671e-05
Probability of good choice for population of 646=48.431
prob - prevprob = 2.43257e-05
Convergence test: (sum - prevsum)/prevsum = 5.02302e-05
Probability of good choice for population of 648=48.4334
prob - prevprob = 2.42131e-05
Convergence test: (sum - prevsum)/prevsum = 4.99951e-05
Probability of good choice for population of 650=48.4358
prob - prevprob = 2.41014e-05
Convergence test: (sum - prevsum)/prevsum = 4.97619e-05
Probability of good choice for population of 652=48.4382
prob - prevprob = 2.39905e-05
Convergence test: (sum - prevsum)/prevsum = 4.95304e-05
Probability of good choice for population of 654=48.4406
prob - prevprob = 2.38804e-05
Convergence test: (sum - prevsum)/prevsum = 4.93008e-05
Probability of good choice for population of 656=48.443
prob - prevprob = 2.37712e-05
Convergence test: (sum - prevsum)/prevsum = 4.90729e-05
Probability of good choice for population of 658=48.4454
prob - prevprob = 2.36628e-05
Convergence test: (sum - prevsum)/prevsum = 4.88468e-05
Probability of good choice for population of 660=48.4477
prob - prevprob = 2.35553e-05
Convergence test: (sum - prevsum)/prevsum = 4.86224e-05
Probability of good choice for population of 662=48.4501
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prob - prevprob = 2.34485e-05
Convergence test: (sum - prevsum)/prevsum = 4.83997e-05
Probability of good choice for population of 664=48.4524
prob - prevprob = 2.33426e-05
Convergence test: (sum - prevsum)/prevsum = 4.81787e-05
Probability of good choice for population of 666=48.4547
prob - prevprob = 2.32374e-05
Convergence test: (sum - prevsum)/prevsum = 4.79593e-05
Probability of good choice for population of 668=48.457
prob - prevprob = 2.31331e-05
Convergence test: (sum - prevsum)/prevsum = 4.77417e-05
Probability of good choice for population of 670=48.4593
prob - prevprob = 2.30295e-05
Convergence test: (sum - prevsum)/prevsum = 4.75256e-05
Probability of good choice for population of 672=48.4616
prob - prevprob = 2.29267e-05
Convergence test: (sum - prevsum)/prevsum = 4.73112e-05
Probability of good choice for population of 674=48.4639
prob - prevprob = 2.28246e-05
Convergence test: (sum - prevsum)/prevsum = 4.70984e-05
Probability of good choice for population of 676=48.4662
prob - prevprob = 2.27233e-05
Convergence test: (sum - prevsum)/prevsum = 4.68872e-05
Probability of good choice for population of 678=48.4684
prob - prevprob = 2.26228e-05
Convergence test: (sum - prevsum)/prevsum = 4.66775e-05
Probability of good choice for population of 680=48.4707
prob - prevprob = 2.2523e-05
Convergence test: (sum - prevsum)/prevsum = 4.64694e-05
Probability of good choice for population of 682=48.4729
prob - prevprob = 2.24239e-05
Convergence test: (sum - prevsum)/prevsum = 4.62628e-05
Probability of good choice for population of 684=48.4752
prob - prevprob = 2.23256e-05
Convergence test: (sum - prevsum)/prevsum = 4.60578e-05
Probability of good choice for population of 686=48.4774
prob - prevprob = 2.22279e-05
Convergence test: (sum - prevsum)/prevsum = 4.58543e-05
Probability of good choice for population of 688=48.4796
prob - prevprob = 2.2131e-05
Convergence test: (sum - prevsum)/prevsum = 4.56522e-05
Probability of good choice for population of 690=48.4818
prob - prevprob = 2.20348e-05
Convergence test: (sum - prevsum)/prevsum = 4.54517e-05
Probability of good choice for population of 692=48.484
prob - prevprob = 2.19393e-05
Convergence test: (sum - prevsum)/prevsum = 4.52526e-05
Probability of good choice for population of 694=48.4862
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prob - prevprob = 2.18444e-05
Convergence test: (sum - prevsum)/prevsum = 4.50549e-05
Probability of good choice for population of 696=48.4884
prob - prevprob = 2.17503e-05
Convergence test: (sum - prevsum)/prevsum = 4.48587e-05
Probability of good choice for population of 698=48.4905
prob - prevprob = 2.16568e-05
Convergence test: (sum - prevsum)/prevsum = 4.46639e-05
Probability of good choice for population of 700=48.4927
prob - prevprob = 2.1564e-05
Convergence test: (sum - prevsum)/prevsum = 4.44705e-05
Probability of good choice for population of 702=48.4948
prob - prevprob = 2.14718e-05
Convergence test: (sum - prevsum)/prevsum = 4.42785e-05
Probability of good choice for population of 704=48.497
prob - prevprob = 2.13803e-05
Convergence test: (sum - prevsum)/prevsum = 4.40878e-05
Probability of good choice for population of 706=48.4991
prob - prevprob = 2.12895e-05
Convergence test: (sum - prevsum)/prevsum = 4.38986e-05
Probability of good choice for population of 708=48.5012
prob - prevprob = 2.11993e-05
Convergence test: (sum - prevsum)/prevsum = 4.37106e-05
Probability of good choice for population of 710=48.5033
prob - prevprob = 2.11097e-05
Convergence test: (sum - prevsum)/prevsum = 4.3524e-05
Probability of good choice for population of 712=48.5054
prob - prevprob = 2.10207e-05
Convergence test: (sum - prevsum)/prevsum = 4.33388e-05
Probability of good choice for population of 714=48.5075
prob - prevprob = 2.09324e-05
Convergence test: (sum - prevsum)/prevsum = 4.31548e-05
Probability of good choice for population of 716=48.5096
prob - prevprob = 2.08447e-05
Convergence test: (sum - prevsum)/prevsum = 4.29721e-05
Probability of good choice for population of 718=48.5117
prob - prevprob = 2.07576e-05
Convergence test: (sum - prevsum)/prevsum = 4.27907e-05
Probability of good choice for population of 720=48.5137
prob - prevprob = 2.06711e-05
Convergence test: (sum - prevsum)/prevsum = 4.26106e-05
Probability of good choice for population of 722=48.5158
prob - prevprob = 2.05852e-05
Convergence test: (sum - prevsum)/prevsum = 4.24318e-05
Probability of good choice for population of 724=48.5179
prob - prevprob = 2.04999e-05
Convergence test: (sum - prevsum)/prevsum = 4.22541e-05
Probability of good choice for population of 726=48.5199
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prob - prevprob = 2.04152e-05
Convergence test: (sum - prevsum)/prevsum = 4.20778e-05
Probability of good choice for population of 728=48.5219
prob - prevprob = 2.03311e-05
Convergence test: (sum - prevsum)/prevsum = 4.19026e-05
Probability of good choice for population of 730=48.524
prob - prevprob = 2.02475e-05
Convergence test: (sum - prevsum)/prevsum = 4.17286e-05
Probability of good choice for population of 732=48.526
prob - prevprob = 2.01646e-05
Convergence test: (sum - prevsum)/prevsum = 4.15559e-05
Probability of good choice for population of 734=48.528
prob - prevprob = 2.00821e-05
Convergence test: (sum - prevsum)/prevsum = 4.13843e-05
Probability of good choice for population of 736=48.53
prob - prevprob = 2.00003e-05
Convergence test: (sum - prevsum)/prevsum = 4.12139e-05
Probability of good choice for population of 738=48.532
prob - prevprob = 1.9919e-05
Convergence test: (sum - prevsum)/prevsum = 4.10447e-05
Probability of good choice for population of 740=48.534
prob - prevprob = 1.98382e-05
Convergence test: (sum - prevsum)/prevsum = 4.08766e-05
Probability of good choice for population of 742=48.5359
prob - prevprob = 1.9758e-05
Convergence test: (sum - prevsum)/prevsum = 4.07097e-05
Probability of good choice for population of 744=48.5379
prob - prevprob = 1.96784e-05
Convergence test: (sum - prevsum)/prevsum = 4.05439e-05
Probability of good choice for population of 746=48.5399
prob - prevprob = 1.95992e-05
Convergence test: (sum - prevsum)/prevsum = 4.03792e-05
Probability of good choice for population of 748=48.5418
prob - prevprob = 1.95206e-05
Convergence test: (sum - prevsum)/prevsum = 4.02156e-05
Probability of good choice for population of 750=48.5438
prob - prevprob = 1.94425e-05
Convergence test: (sum - prevsum)/prevsum = 4.00532e-05
Probability of good choice for population of 752=48.5457
prob - prevprob = 1.9365e-05
Convergence test: (sum - prevsum)/prevsum = 3.98918e-05
Probability of good choice for population of 754=48.5476
prob - prevprob = 1.92879e-05
Convergence test: (sum - prevsum)/prevsum = 3.97315e-05
Probability of good choice for population of 756=48.5495
prob - prevprob = 1.92114e-05
Convergence test: (sum - prevsum)/prevsum = 3.95722e-05
Probability of good choice for population of 758=48.5515
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prob - prevprob = 1.91353e-05
Convergence test: (sum - prevsum)/prevsum = 3.94141e-05
Probability of good choice for population of 760=48.5534
prob - prevprob = 1.90598e-05
Convergence test: (sum - prevsum)/prevsum = 3.92569e-05
Probability of good choice for population of 762=48.5553
prob - prevprob = 1.89848e-05
Convergence test: (sum - prevsum)/prevsum = 3.91008e-05
Probability of good choice for population of 764=48.5571
prob - prevprob = 1.89102e-05
Convergence test: (sum - prevsum)/prevsum = 3.89458e-05
Probability of good choice for population of 766=48.559
prob - prevprob = 1.88362e-05
Convergence test: (sum - prevsum)/prevsum = 3.87917e-05
Probability of good choice for population of 768=48.5609
prob - prevprob = 1.87626e-05
Convergence test: (sum - prevsum)/prevsum = 3.86387e-05
Probability of good choice for population of 770=48.5628
prob - prevprob = 1.86895e-05
Convergence test: (sum - prevsum)/prevsum = 3.84867e-05
Probability of good choice for population of 772=48.5646
prob - prevprob = 1.86169e-05
Convergence test: (sum - prevsum)/prevsum = 3.83357e-05
Probability of good choice for population of 774=48.5665
prob - prevprob = 1.85447e-05
Convergence test: (sum - prevsum)/prevsum = 3.81856e-05
Probability of good choice for population of 776=48.5683
prob - prevprob = 1.8473e-05
Convergence test: (sum - prevsum)/prevsum = 3.80365e-05
Probability of good choice for population of 778=48.5702
prob - prevprob = 1.84018e-05
Convergence test: (sum - prevsum)/prevsum = 3.78884e-05
Probability of good choice for population of 780=48.572
prob - prevprob = 1.8331e-05
Convergence test: (sum - prevsum)/prevsum = 3.77413e-05
Probability of good choice for population of 782=48.5738
prob - prevprob = 1.82607e-05
Convergence test: (sum - prevsum)/prevsum = 3.75951e-05
Probability of good choice for population of 784=48.5757
prob - prevprob = 1.81908e-05
Convergence test: (sum - prevsum)/prevsum = 3.74498e-05
Probability of good choice for population of 786=48.5775
prob - prevprob = 1.81214e-05
Convergence test: (sum - prevsum)/prevsum = 3.73055e-05
Probability of good choice for population of 788=48.5793
prob - prevprob = 1.80524e-05
Convergence test: (sum - prevsum)/prevsum = 3.7162e-05
Probability of good choice for population of 790=48.5811
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prob - prevprob = 1.79838e-05
Convergence test: (sum - prevsum)/prevsum = 3.70195e-05
Probability of good choice for population of 792=48.5829
prob - prevprob = 1.79157e-05
Convergence test: (sum - prevsum)/prevsum = 3.6878e-05
Probability of good choice for population of 794=48.5847
prob - prevprob = 1.7848e-05
Convergence test: (sum - prevsum)/prevsum = 3.67373e-05
Probability of good choice for population of 796=48.5864
prob - prevprob = 1.77807e-05
Convergence test: (sum - prevsum)/prevsum = 3.65975e-05
Probability of good choice for population of 798=48.5882
prob - prevprob = 1.77139e-05
Convergence test: (sum - prevsum)/prevsum = 3.64585e-05
Probability of good choice for population of 800=48.59
prob - prevprob = 1.76475e-05
Convergence test: (sum - prevsum)/prevsum = 3.63205e-05
Probability of good choice for population of 802=48.5917
prob - prevprob = 1.75815e-05
Convergence test: (sum - prevsum)/prevsum = 3.61833e-05
Probability of good choice for population of 804=48.5935
prob - prevprob = 1.75159e-05
Convergence test: (sum - prevsum)/prevsum = 3.6047e-05
Probability of good choice for population of 806=48.5952
prob - prevprob = 1.74507e-05
Convergence test: (sum - prevsum)/prevsum = 3.59115e-05
Probability of good choice for population of 808=48.597
prob - prevprob = 1.73859e-05
Convergence test: (sum - prevsum)/prevsum = 3.57769e-05
Probability of good choice for population of 810=48.5987
prob - prevprob = 1.73215e-05
Convergence test: (sum - prevsum)/prevsum = 3.56431e-05
Probability of good choice for population of 812=48.6004
prob - prevprob = 1.72575e-05
Convergence test: (sum - prevsum)/prevsum = 3.55102e-05
Probability of good choice for population of 814=48.6021
prob - prevprob = 1.71939e-05
Convergence test: (sum - prevsum)/prevsum = 3.53781e-05
Probability of good choice for population of 816=48.6039
prob - prevprob = 1.71307e-05
Convergence test: (sum - prevsum)/prevsum = 3.52467e-05
Probability of good choice for population of 818=48.6056
prob - prevprob = 1.70678e-05
Convergence test: (sum - prevsum)/prevsum = 3.51162e-05
Probability of good choice for population of 820=48.6073
prob - prevprob = 1.70054e-05
Convergence test: (sum - prevsum)/prevsum = 3.49865e-05
Probability of good choice for population of 822=48.609
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prob - prevprob = 1.69433e-05
Convergence test: (sum - prevsum)/prevsum = 3.48576e-05
Probability of good choice for population of 824=48.6106
prob - prevprob = 1.68816e-05
Convergence test: (sum - prevsum)/prevsum = 3.47295e-05
Probability of good choice for population of 826=48.6123
prob - prevprob = 1.68203e-05
Convergence test: (sum - prevsum)/prevsum = 3.46022e-05
Probability of good choice for population of 828=48.614
prob - prevprob = 1.67594e-05
Convergence test: (sum - prevsum)/prevsum = 3.44756e-05
Probability of good choice for population of 830=48.6157
prob - prevprob = 1.66988e-05
Convergence test: (sum - prevsum)/prevsum = 3.43498e-05
Probability of good choice for population of 832=48.6173
prob - prevprob = 1.66386e-05
Convergence test: (sum - prevsum)/prevsum = 3.42248e-05
Probability of good choice for population of 834=48.619
prob - prevprob = 1.65788e-05
Convergence test: (sum - prevsum)/prevsum = 3.41005e-05
Probability of good choice for population of 836=48.6206
prob - prevprob = 1.65193e-05
Convergence test: (sum - prevsum)/prevsum = 3.3977e-05
Probability of good choice for population of 838=48.6223
prob - prevprob = 1.64601e-05
Convergence test: (sum - prevsum)/prevsum = 3.38542e-05
Probability of good choice for population of 840=48.6239
prob - prevprob = 1.64013e-05
Convergence test: (sum - prevsum)/prevsum = 3.37321e-05
Probability of good choice for population of 842=48.6256
prob - prevprob = 1.63429e-05
Convergence test: (sum - prevsum)/prevsum = 3.36108e-05
Probability of good choice for population of 844=48.6272
prob - prevprob = 1.62848e-05
Convergence test: (sum - prevsum)/prevsum = 3.34902e-05
Probability of good choice for population of 846=48.6288
prob - prevprob = 1.62271e-05
Convergence test: (sum - prevsum)/prevsum = 3.33703e-05
Probability of good choice for population of 848=48.6304
prob - prevprob = 1.61697e-05
Convergence test: (sum - prevsum)/prevsum = 3.32512e-05
Probability of good choice for population of 850=48.632
prob - prevprob = 1.61126e-05
Convergence test: (sum - prevsum)/prevsum = 3.31327e-05
Probability of good choice for population of 852=48.6336
prob - prevprob = 1.60558e-05
Convergence test: (sum - prevsum)/prevsum = 3.3015e-05
Probability of good choice for population of 854=48.6352
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prob - prevprob = 1.59994e-05
Convergence test: (sum - prevsum)/prevsum = 3.28979e-05
Probability of good choice for population of 856=48.6368
prob - prevprob = 1.59434e-05
Convergence test: (sum - prevsum)/prevsum = 3.27815e-05
Probability of good choice for population of 858=48.6384
prob - prevprob = 1.58876e-05
Convergence test: (sum - prevsum)/prevsum = 3.26658e-05
Probability of good choice for population of 860=48.64
prob - prevprob = 1.58322e-05
Convergence test: (sum - prevsum)/prevsum = 3.25508e-05
Probability of good choice for population of 862=48.6416
prob - prevprob = 1.57771e-05
Convergence test: (sum - prevsum)/prevsum = 3.24365e-05
Probability of good choice for population of 864=48.6432
prob - prevprob = 1.57223e-05
Convergence test: (sum - prevsum)/prevsum = 3.23228e-05
Probability of good choice for population of 866=48.6447
prob - prevprob = 1.56679e-05
Convergence test: (sum - prevsum)/prevsum = 3.22098e-05
Probability of good choice for population of 868=48.6463
prob - prevprob = 1.56137e-05
Convergence test: (sum - prevsum)/prevsum = 3.20974e-05
Probability of good choice for population of 870=48.6478
prob - prevprob = 1.55599e-05
Convergence test: (sum - prevsum)/prevsum = 3.19857e-05
Probability of good choice for population of 872=48.6494
prob - prevprob = 1.55063e-05
Convergence test: (sum - prevsum)/prevsum = 3.18747e-05
Probability of good choice for population of 874=48.6509
prob - prevprob = 1.54531e-05
Convergence test: (sum - prevsum)/prevsum = 3.17642e-05
Probability of good choice for population of 876=48.6525
prob - prevprob = 1.54002e-05
Convergence test: (sum - prevsum)/prevsum = 3.16544e-05
Probability of good choice for population of 878=48.654
prob - prevprob = 1.53476e-05
Convergence test: (sum - prevsum)/prevsum = 3.15453e-05
Probability of good choice for population of 880=48.6555
prob - prevprob = 1.52952e-05
Convergence test: (sum - prevsum)/prevsum = 3.14368e-05
Probability of good choice for population of 882=48.6571
prob - prevprob = 1.52432e-05
Convergence test: (sum - prevsum)/prevsum = 3.13288e-05
Probability of good choice for population of 884=48.6586
prob - prevprob = 1.51915e-05
Convergence test: (sum - prevsum)/prevsum = 3.12215e-05
Probability of good choice for population of 886=48.6601
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prob - prevprob = 1.51401e-05
Convergence test: (sum - prevsum)/prevsum = 3.11149e-05
Probability of good choice for population of 888=48.6616
prob - prevprob = 1.50889e-05
Convergence test: (sum - prevsum)/prevsum = 3.10088e-05
Probability of good choice for population of 890=48.6631
prob - prevprob = 1.5038e-05
Convergence test: (sum - prevsum)/prevsum = 3.09033e-05
Probability of good choice for population of 892=48.6646
prob - prevprob = 1.49875e-05
Convergence test: (sum - prevsum)/prevsum = 3.07984e-05
Probability of good choice for population of 894=48.6661
prob - prevprob = 1.49372e-05
Convergence test: (sum - prevsum)/prevsum = 3.06941e-05
Probability of good choice for population of 896=48.6676
prob - prevprob = 1.48872e-05
Convergence test: (sum - prevsum)/prevsum = 3.05904e-05
Probability of good choice for population of 898=48.6691
prob - prevprob = 1.48374e-05
Convergence test: (sum - prevsum)/prevsum = 3.04873e-05
Probability of good choice for population of 900=48.6706
prob - prevprob = 1.4788e-05
Convergence test: (sum - prevsum)/prevsum = 3.03847e-05
Probability of good choice for population of 902=48.672
prob - prevprob = 1.47388e-05
Convergence test: (sum - prevsum)/prevsum = 3.02827e-05
Probability of good choice for population of 904=48.6735
prob - prevprob = 1.46899e-05
Convergence test: (sum - prevsum)/prevsum = 3.01813e-05
Probability of good choice for population of 906=48.675
prob - prevprob = 1.46412e-05
Convergence test: (sum - prevsum)/prevsum = 3.00805e-05
Probability of good choice for population of 908=48.6764
prob - prevprob = 1.45929e-05
Convergence test: (sum - prevsum)/prevsum = 2.99802e-05
Probability of good choice for population of 910=48.6779
prob - prevprob = 1.45447e-05
Convergence test: (sum - prevsum)/prevsum = 2.98805e-05
Probability of good choice for population of 912=48.6793
prob - prevprob = 1.44969e-05
Convergence test: (sum - prevsum)/prevsum = 2.97813e-05
Probability of good choice for population of 914=48.6808
prob - prevprob = 1.44493e-05
Convergence test: (sum - prevsum)/prevsum = 2.96827e-05
Probability of good choice for population of 916=48.6822
prob - prevprob = 1.4402e-05
Convergence test: (sum - prevsum)/prevsum = 2.95846e-05
Probability of good choice for population of 918=48.6837
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prob - prevprob = 1.43549e-05
Convergence test: (sum - prevsum)/prevsum = 2.9487e-05
Probability of good choice for population of 920=48.6851
prob - prevprob = 1.43081e-05
Convergence test: (sum - prevsum)/prevsum = 2.939e-05
Probability of good choice for population of 922=48.6865
prob - prevprob = 1.42616e-05
Convergence test: (sum - prevsum)/prevsum = 2.92935e-05
Probability of good choice for population of 924=48.6879
prob - prevprob = 1.42153e-05
Convergence test: (sum - prevsum)/prevsum = 2.91975e-05
Probability of good choice for population of 926=48.6893
prob - prevprob = 1.41692e-05
Convergence test: (sum - prevsum)/prevsum = 2.91021e-05
Probability of good choice for population of 928=48.6908
prob - prevprob = 1.41234e-05
Convergence test: (sum - prevsum)/prevsum = 2.90072e-05
Probability of good choice for population of 930=48.6922
prob - prevprob = 1.40778e-05
Convergence test: (sum - prevsum)/prevsum = 2.89128e-05
Probability of good choice for population of 932=48.6936
prob - prevprob = 1.40325e-05
Convergence test: (sum - prevsum)/prevsum = 2.88189e-05
Probability of good choice for population of 934=48.695
prob - prevprob = 1.39875e-05
Convergence test: (sum - prevsum)/prevsum = 2.87255e-05
Probability of good choice for population of 936=48.6964
prob - prevprob = 1.39426e-05
Convergence test: (sum - prevsum)/prevsum = 2.86326e-05
Probability of good choice for population of 938=48.6978
prob - prevprob = 1.3898e-05
Convergence test: (sum - prevsum)/prevsum = 2.85402e-05
Probability of good choice for population of 940=48.6991
prob - prevprob = 1.38537e-05
Convergence test: (sum - prevsum)/prevsum = 2.84483e-05
Probability of good choice for population of 942=48.7005
prob - prevprob = 1.38096e-05
Convergence test: (sum - prevsum)/prevsum = 2.83569e-05
Probability of good choice for population of 944=48.7019
prob - prevprob = 1.37657e-05
Convergence test: (sum - prevsum)/prevsum = 2.8266e-05
Probability of good choice for population of 946=48.7033
prob - prevprob = 1.3722e-05
Convergence test: (sum - prevsum)/prevsum = 2.81755e-05
Probability of good choice for population of 948=48.7046
prob - prevprob = 1.36786e-05
Convergence test: (sum - prevsum)/prevsum = 2.80856e-05
Probability of good choice for population of 950=48.706
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prob - prevprob = 1.36354e-05
Convergence test: (sum - prevsum)/prevsum = 2.79961e-05
Probability of good choice for population of 952=48.7074
prob - prevprob = 1.35924e-05
Convergence test: (sum - prevsum)/prevsum = 2.79071e-05
Probability of good choice for population of 954=48.7087
prob - prevprob = 1.35497e-05
Convergence test: (sum - prevsum)/prevsum = 2.78186e-05
Probability of good choice for population of 956=48.7101
prob - prevprob = 1.35072e-05
Convergence test: (sum - prevsum)/prevsum = 2.77305e-05
Probability of good choice for population of 958=48.7114
prob - prevprob = 1.34649e-05
Convergence test: (sum - prevsum)/prevsum = 2.76429e-05
Probability of good choice for population of 960=48.7128
prob - prevprob = 1.34228e-05
Convergence test: (sum - prevsum)/prevsum = 2.75557e-05
Probability of good choice for population of 962=48.7141
prob - prevprob = 1.33809e-05
Convergence test: (sum - prevsum)/prevsum = 2.7469e-05
Probability of good choice for population of 964=48.7154
prob - prevprob = 1.33393e-05
Convergence test: (sum - prevsum)/prevsum = 2.73828e-05
Probability of good choice for population of 966=48.7168
prob - prevprob = 1.32979e-05
Convergence test: (sum - prevsum)/prevsum = 2.7297e-05
Probability of good choice for population of 968=48.7181
prob - prevprob = 1.32566e-05
Convergence test: (sum - prevsum)/prevsum = 2.72117e-05
Probability of good choice for population of 970=48.7194
prob - prevprob = 1.32156e-05
Convergence test: (sum - prevsum)/prevsum = 2.71268e-05
Probability of good choice for population of 972=48.7207
prob - prevprob = 1.31749e-05
Convergence test: (sum - prevsum)/prevsum = 2.70423e-05
Probability of good choice for population of 974=48.722
prob - prevprob = 1.31343e-05
Convergence test: (sum - prevsum)/prevsum = 2.69583e-05
Probability of good choice for population of 976=48.7233
prob - prevprob = 1.30939e-05
Convergence test: (sum - prevsum)/prevsum = 2.68747e-05
Probability of good choice for population of 978=48.7246
prob - prevprob = 1.30537e-05
Convergence test: (sum - prevsum)/prevsum = 2.67916e-05
Probability of good choice for population of 980=48.726
prob - prevprob = 1.30138e-05
Convergence test: (sum - prevsum)/prevsum = 2.67088e-05
Probability of good choice for population of 982=48.7272
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prob - prevprob = 1.2974e-05
Convergence test: (sum - prevsum)/prevsum = 2.66265e-05
Probability of good choice for population of 984=48.7285
prob - prevprob = 1.29345e-05
Convergence test: (sum - prevsum)/prevsum = 2.65446e-05
Probability of good choice for population of 986=48.7298
prob - prevprob = 1.28951e-05
Convergence test: (sum - prevsum)/prevsum = 2.64632e-05
Probability of good choice for population of 988=48.7311
prob - prevprob = 1.2856e-05
Convergence test: (sum - prevsum)/prevsum = 2.63821e-05
Probability of good choice for population of 990=48.7324
prob - prevprob = 1.2817e-05
Convergence test: (sum - prevsum)/prevsum = 2.63015e-05
Probability of good choice for population of 992=48.7337
prob - prevprob = 1.27782e-05
Convergence test: (sum - prevsum)/prevsum = 2.62212e-05
Probability of good choice for population of 994=48.735
prob - prevprob = 1.27397e-05
Convergence test: (sum - prevsum)/prevsum = 2.61414e-05
Probability of good choice for population of 996=48.7362
prob - prevprob = 1.27013e-05
Convergence test: (sum - prevsum)/prevsum = 2.6062e-05
Probability of good choice for population of 998=48.7375
prob - prevprob = 1.26631e-05
Convergence test: (sum - prevsum)/prevsum = 2.5983e-05
Probability of good choice for population of 1000=48.7387
prob - prevprob = 1.26251e-05
Convergence test: (sum - prevsum)/prevsum = 2.59044e-05
Probability of good choice for population of 1002=48.74
prob - prevprob = 1.25873e-05
Convergence test: (sum - prevsum)/prevsum = 2.58261e-05
Probability of good choice for population of 1004=48.7413
prob - prevprob = 1.25497e-05
Convergence test: (sum - prevsum)/prevsum = 2.57483e-05
Probability of good choice for population of 1006=48.7425
prob - prevprob = 1.25123e-05
Convergence test: (sum - prevsum)/prevsum = 2.56709e-05
Probability of good choice for population of 1008=48.7438
prob - prevprob = 1.24751e-05
Convergence test: (sum - prevsum)/prevsum = 2.55938e-05
Probability of good choice for population of 1010=48.745
prob - prevprob = 1.2438e-05
Convergence test: (sum - prevsum)/prevsum = 2.55171e-05
Probability of good choice for population of 1012=48.7462
prob - prevprob = 1.24011e-05
Convergence test: (sum - prevsum)/prevsum = 2.54408e-05
Probability of good choice for population of 1014=48.7475
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prob - prevprob = 1.23644e-05
Convergence test: (sum - prevsum)/prevsum = 2.53649e-05
Probability of good choice for population of 1016=48.7487
prob - prevprob = 1.23279e-05
Convergence test: (sum - prevsum)/prevsum = 2.52894e-05
Probability of good choice for population of 1018=48.7499
prob - prevprob = 1.22916e-05
Convergence test: (sum - prevsum)/prevsum = 2.52142e-05
Probability of good choice for population of 1020=48.7512
prob - prevprob = 1.22555e-05
Convergence test: (sum - prevsum)/prevsum = 2.51394e-05
Probability of good choice for population of 1022=48.7524
prob - prevprob = 1.22195e-05
Convergence test: (sum - prevsum)/prevsum = 2.5065e-05
Probability of good choice for population of 1024=48.7536
prob - prevprob = 1.21837e-05
Convergence test: (sum - prevsum)/prevsum = 2.49909e-05
Probability of good choice for population of 1026=48.7548
prob - prevprob = 1.21481e-05
Convergence test: (sum - prevsum)/prevsum = 2.49172e-05
Probability of good choice for population of 1028=48.756
prob - prevprob = 1.21126e-05
Convergence test: (sum - prevsum)/prevsum = 2.48439e-05
Probability of good choice for population of 1030=48.7572
prob - prevprob = 1.20773e-05
Convergence test: (sum - prevsum)/prevsum = 2.47709e-05
Probability of good choice for population of 1032=48.7584
prob - prevprob = 1.20422e-05
Convergence test: (sum - prevsum)/prevsum = 2.46983e-05
Probability of good choice for population of 1034=48.7596
prob - prevprob = 1.20073e-05
Convergence test: (sum - prevsum)/prevsum = 2.4626e-05
Probability of good choice for population of 1036=48.7608
prob - prevprob = 1.19725e-05
Convergence test: (sum - prevsum)/prevsum = 2.45541e-05
Probability of good choice for population of 1038=48.762
prob - prevprob = 1.19379e-05
Convergence test: (sum - prevsum)/prevsum = 2.44826e-05
Probability of good choice for population of 1040=48.7632
prob - prevprob = 1.19035e-05
Convergence test: (sum - prevsum)/prevsum = 2.44113e-05
Probability of good choice for population of 1042=48.7644
prob - prevprob = 1.18692e-05
Convergence test: (sum - prevsum)/prevsum = 2.43405e-05
Probability of good choice for population of 1044=48.7656
prob - prevprob = 1.18351e-05
Convergence test: (sum - prevsum)/prevsum = 2.42699e-05
Probability of good choice for population of 1046=48.7668
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prob - prevprob = 1.18011e-05
Convergence test: (sum - prevsum)/prevsum = 2.41997e-05
Probability of good choice for population of 1048=48.768
prob - prevprob = 1.17674e-05
Convergence test: (sum - prevsum)/prevsum = 2.41299e-05
Probability of good choice for population of 1050=48.7691
prob - prevprob = 1.17337e-05
Convergence test: (sum - prevsum)/prevsum = 2.40604e-05
Probability of good choice for population of 1052=48.7703
prob - prevprob = 1.17003e-05
Convergence test: (sum - prevsum)/prevsum = 2.39912e-05
Probability of good choice for population of 1054=48.7715
prob - prevprob = 1.1667e-05
Convergence test: (sum - prevsum)/prevsum = 2.39223e-05
Probability of good choice for population of 1056=48.7726
prob - prevprob = 1.16338e-05
Convergence test: (sum - prevsum)/prevsum = 2.38538e-05
Probability of good choice for population of 1058=48.7738
prob - prevprob = 1.16008e-05
Convergence test: (sum - prevsum)/prevsum = 2.37856e-05
Probability of good choice for population of 1060=48.7749
prob - prevprob = 1.1568e-05
Convergence test: (sum - prevsum)/prevsum = 2.37177e-05
Probability of good choice for population of 1062=48.7761
prob - prevprob = 1.15353e-05
Convergence test: (sum - prevsum)/prevsum = 2.36501e-05
Probability of good choice for population of 1064=48.7773
prob - prevprob = 1.15028e-05
Convergence test: (sum - prevsum)/prevsum = 2.35829e-05
Probability of good choice for population of 1066=48.7784
prob - prevprob = 1.14704e-05
Convergence test: (sum - prevsum)/prevsum = 2.3516e-05
Probability of good choice for population of 1068=48.7795
prob - prevprob = 1.14382e-05
Convergence test: (sum - prevsum)/prevsum = 2.34494e-05
Probability of good choice for population of 1070=48.7807
prob - prevprob = 1.14061e-05
Convergence test: (sum - prevsum)/prevsum = 2.33831e-05
Probability of good choice for population of 1072=48.7818
prob - prevprob = 1.13742e-05
Convergence test: (sum - prevsum)/prevsum = 2.33171e-05
Probability of good choice for population of 1074=48.783
prob - prevprob = 1.13425e-05
Convergence test: (sum - prevsum)/prevsum = 2.32514e-05
Probability of good choice for population of 1076=48.7841
prob - prevprob = 1.13108e-05
Convergence test: (sum - prevsum)/prevsum = 2.3186e-05
Probability of good choice for population of 1078=48.7852
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prob - prevprob = 1.12794e-05
Convergence test: (sum - prevsum)/prevsum = 2.3121e-05
Probability of good choice for population of 1080=48.7863
prob - prevprob = 1.1248e-05
Convergence test: (sum - prevsum)/prevsum = 2.30562e-05
Probability of good choice for population of 1082=48.7875
prob - prevprob = 1.12168e-05
Convergence test: (sum - prevsum)/prevsum = 2.29918e-05
Probability of good choice for population of 1084=48.7886
prob - prevprob = 1.11858e-05
Convergence test: (sum - prevsum)/prevsum = 2.29276e-05
Probability of good choice for population of 1086=48.7897
prob - prevprob = 1.11549e-05
Convergence test: (sum - prevsum)/prevsum = 2.28637e-05
Probability of good choice for population of 1088=48.7908
prob - prevprob = 1.11241e-05
Convergence test: (sum - prevsum)/prevsum = 2.28002e-05
Probability of good choice for population of 1090=48.7919
prob - prevprob = 1.10935e-05
Convergence test: (sum - prevsum)/prevsum = 2.27369e-05
Probability of good choice for population of 1092=48.793
prob - prevprob = 1.1063e-05
Convergence test: (sum - prevsum)/prevsum = 2.26739e-05
Probability of good choice for population of 1094=48.7941
prob - prevprob = 1.10327e-05
Convergence test: (sum - prevsum)/prevsum = 2.26112e-05
Probability of good choice for population of 1096=48.7952
prob - prevprob = 1.10025e-05
Convergence test: (sum - prevsum)/prevsum = 2.25488e-05
Probability of good choice for population of 1098=48.7963
prob - prevprob = 1.09724e-05
Convergence test: (sum - prevsum)/prevsum = 2.24867e-05
Probability of good choice for population of 1100=48.7974
prob - prevprob = 1.09425e-05
Convergence test: (sum - prevsum)/prevsum = 2.24249e-05
Probability of good choice for population of 1102=48.7985
prob - prevprob = 1.09127e-05
Convergence test: (sum - prevsum)/prevsum = 2.23633e-05
Probability of good choice for population of 1104=48.7996
prob - prevprob = 1.08831e-05
Convergence test: (sum - prevsum)/prevsum = 2.23021e-05
Probability of good choice for population of 1106=48.8007
prob - prevprob = 1.08536e-05
Convergence test: (sum - prevsum)/prevsum = 2.22411e-05
Probability of good choice for population of 1108=48.8018
prob - prevprob = 1.08242e-05
Convergence test: (sum - prevsum)/prevsum = 2.21804e-05
Probability of good choice for population of 1110=48.8028
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prob - prevprob = 1.07949e-05
Convergence test: (sum - prevsum)/prevsum = 2.21199e-05
Probability of good choice for population of 1112=48.8039
prob - prevprob = 1.07658e-05
Convergence test: (sum - prevsum)/prevsum = 2.20598e-05
Probability of good choice for population of 1114=48.805
prob - prevprob = 1.07368e-05
Convergence test: (sum - prevsum)/prevsum = 2.19999e-05
Probability of good choice for population of 1116=48.8061
prob - prevprob = 1.07079e-05
Convergence test: (sum - prevsum)/prevsum = 2.19402e-05
Probability of good choice for population of 1118=48.8071
prob - prevprob = 1.06792e-05
Convergence test: (sum - prevsum)/prevsum = 2.18809e-05
Probability of good choice for population of 1120=48.8082
prob - prevprob = 1.06506e-05
Convergence test: (sum - prevsum)/prevsum = 2.18218e-05
Probability of good choice for population of 1122=48.8093
prob - prevprob = 1.06221e-05
Convergence test: (sum - prevsum)/prevsum = 2.1763e-05
Probability of good choice for population of 1124=48.8103
prob - prevprob = 1.05938e-05
Convergence test: (sum - prevsum)/prevsum = 2.17044e-05
Probability of good choice for population of 1126=48.8114
prob - prevprob = 1.05655e-05
Convergence test: (sum - prevsum)/prevsum = 2.16461e-05
Probability of good choice for population of 1128=48.8124
prob - prevprob = 1.05374e-05
Convergence test: (sum - prevsum)/prevsum = 2.15881e-05
Probability of good choice for population of 1130=48.8135
prob - prevprob = 1.05095e-05
Convergence test: (sum - prevsum)/prevsum = 2.15303e-05
Probability of good choice for population of 1132=48.8145
prob - prevprob = 1.04816e-05
Convergence test: (sum - prevsum)/prevsum = 2.14728e-05
Probability of good choice for population of 1134=48.8156
prob - prevprob = 1.04539e-05
Convergence test: (sum - prevsum)/prevsum = 2.14155e-05
Probability of good choice for population of 1136=48.8166
prob - prevprob = 1.04263e-05
Convergence test: (sum - prevsum)/prevsum = 2.13585e-05
Probability of good choice for population of 1138=48.8177
prob - prevprob = 1.03988e-05
Convergence test: (sum - prevsum)/prevsum = 2.13018e-05
Probability of good choice for population of 1140=48.8187
prob - prevprob = 1.03714e-05
Convergence test: (sum - prevsum)/prevsum = 2.12452e-05
Probability of good choice for population of 1142=48.8197
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```
prob - prevprob = 1.03442e-05
Convergence test: (sum - prevsum)/prevsum = 2.1189e-05
Probability of good choice for population of 1144=48.8208
prob - prevprob = 1.03171e-05
Convergence test: (sum - prevsum)/prevsum = 2.1133e-05
Probability of good choice for population of 1146=48.8218
prob - prevprob = 1.02901e-05
Convergence test: (sum - prevsum)/prevsum = 2.10772e-05
Probability of good choice for population of 1148=48.8228
prob - prevprob = 1.02632e-05
Convergence test: (sum - prevsum)/prevsum = 2.10217e-05
Probability of good choice for population of 1150=48.8238
prob - prevprob = 1.02364e-05
Convergence test: (sum - prevsum)/prevsum = 2.09664e-05
Probability of good choice for population of 1152=48.8249
prob - prevprob = 1.02097e-05
Convergence test: (sum - prevsum)/prevsum = 2.09114e-05
Probability of good choice for population of 1154=48.8259
prob - prevprob = 1.01832e-05
Convergence test: (sum - prevsum)/prevsum = 2.08566e-05
Probability of good choice for population of 1156=48.8269
prob - prevprob = 1.01568e-05
Convergence test: (sum - prevsum)/prevsum = 2.0802e-05
Probability of good choice for population of 1158=48.8279
prob - prevprob = 1.01304e-05
Convergence test: (sum - prevsum)/prevsum = 2.07477e-05
Probability of good choice for population of 1160=48.8289
prob - prevprob = 1.01042e-05
Convergence test: (sum - prevsum)/prevsum = 2.06936e-05
Probability of good choice for population of 1162=48.8299
prob - prevprob = 1.00782e-05
Convergence test: (sum - prevsum)/prevsum = 2.06397e-05
Probability of good choice for population of 1164=48.8309
prob - prevprob = 1.00522e-05
Convergence test: (sum - prevsum)/prevsum = 2.05861e-05
Probability of good choice for population of 1166=48.8319
prob - prevprob = 1.00263e-05
Convergence test: (sum - prevsum)/prevsum = 2.05327e-05
Probability of good choice for population of 1168=48.8329
prob - prevprob = 1.00006e-05
Convergence test: (sum - prevsum)/prevsum = 2.04796e-05
Probability of good choice for population of 1170=48.8339
prob - prevprob = 9.97493e-06
Convergence test: (sum - prevsum)/prevsum = 2.04266e-05
Probability of good choice for population of 1172=48.8349
prob - prevprob = 9.9494e-06
Convergence test: (sum - prevsum)/prevsum = 2.03739e-05
Probability of good choice for population of 1174=48.8359
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prob - prevprob = 9.92397e-06
Convergence test: (sum - prevsum)/prevsum = 2.03215e-05
Probability of good choice for population of 1176=48.8369
prob - prevprob = 9.89866e-06
Convergence test: (sum - prevsum)/prevsum = 2.02692e-05
Probability of good choice for population of 1178=48.8379
prob - prevprob = 9.87345e-06
Convergence test: (sum - prevsum)/prevsum = 2.02172e-05
Probability of good choice for population of 1180=48.8389
prob - prevprob = 9.84834e-06
Convergence test: (sum - prevsum)/prevsum = 2.01654e-05
Probability of good choice for population of 1182=48.8399
prob - prevprob = 9.82335e-06
Convergence test: (sum - prevsum)/prevsum = 2.01138e-05
Probability of good choice for population of 1184=48.8408
prob - prevprob = 9.79846e-06
Convergence test: (sum - prevsum)/prevsum = 2.00624e-05
Probability of good choice for population of 1186=48.8418
prob - prevprob = 9.77367e-06
Convergence test: (sum - prevsum)/prevsum = 2.00113e-05
Probability of good choice for population of 1188=48.8428
prob - prevprob = 9.74899e-06
Convergence test: (sum - prevsum)/prevsum = 1.99603e-05
Probability of good choice for population of 1190=48.8438
prob - prevprob = 9.72442e-06
Convergence test: (sum - prevsum)/prevsum = 1.99096e-05
Probability of good choice for population of 1192=48.8447
prob - prevprob = 9.69994e-06
Convergence test: (sum - prevsum)/prevsum = 1.98591e-05
Probability of good choice for population of 1194=48.8457
prob - prevprob = 9.67557e-06
Convergence test: (sum - prevsum)/prevsum = 1.98088e-05
Probability of good choice for population of 1196=48.8467
prob - prevprob = 9.6513e-06
Convergence test: (sum - prevsum)/prevsum = 1.97587e-05
Probability of good choice for population of 1198=48.8476
prob - prevprob = 9.62713e-06
Convergence test: (sum - prevsum)/prevsum = 1.97089e-05
Probability of good choice for population of 1200=48.8486
prob - prevprob = 9.60306e-06
Convergence test: (sum - prevsum)/prevsum = 1.96592e-05
Probability of good choice for population of 1202=48.8496
prob - prevprob = 9.5791e-06
Convergence test: (sum - prevsum)/prevsum = 1.96098e-05
Probability of good choice for population of 1204=48.8505
prob - prevprob = 9.55523e-06
Convergence test: (sum - prevsum)/prevsum = 1.95605e-05
Probability of good choice for population of 1206=48.8515
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prob - prevprob = 9.53146e-06
Convergence test: (sum - prevsum)/prevsum = 1.95115e-05
Probability of good choice for population of 1208=48.8524
prob - prevprob = 9.50779e-06
Convergence test: (sum - prevsum)/prevsum = 1.94626e-05
Probability of good choice for population of 1210=48.8534
prob - prevprob = 9.48421e-06
Convergence test: (sum - prevsum)/prevsum = 1.9414e-05
Probability of good choice for population of 1212=48.8543
prob - prevprob = 9.46074e-06
Convergence test: (sum - prevsum)/prevsum = 1.93656e-05
Probability of good choice for population of 1214=48.8552
prob - prevprob = 9.43736e-06
Convergence test: (sum - prevsum)/prevsum = 1.93174e-05
Probability of good choice for population of 1216=48.8562
prob - prevprob = 9.41408e-06
Convergence test: (sum - prevsum)/prevsum = 1.92693e-05
Probability of good choice for population of 1218=48.8571
prob - prevprob = 9.39089e-06
Convergence test: (sum - prevsum)/prevsum = 1.92215e-05
Probability of good choice for population of 1220=48.8581
prob - prevprob = 9.3678e-06
Convergence test: (sum - prevsum)/prevsum = 1.91739e-05
Probability of good choice for population of 1222=48.859
prob - prevprob = 9.3448e-06
Convergence test: (sum - prevsum)/prevsum = 1.91264e-05
Probability of good choice for population of 1224=48.8599
prob - prevprob = 9.32189e-06
Convergence test: (sum - prevsum)/prevsum = 1.90792e-05
Probability of good choice for population of 1226=48.8609
prob - prevprob = 9.29908e-06
Convergence test: (sum - prevsum)/prevsum = 1.90321e-05
Probability of good choice for population of 1228=48.8618
prob - prevprob = 9.27637e-06
Convergence test: (sum - prevsum)/prevsum = 1.89853e-05
Probability of good choice for population of 1230=48.8627
prob - prevprob = 9.25374e-06
Convergence test: (sum - prevsum)/prevsum = 1.89386e-05
Probability of good choice for population of 1232=48.8636
prob - prevprob = 9.23121e-06
Convergence test: (sum - prevsum)/prevsum = 1.88921e-05
Probability of good choice for population of 1234=48.8646
prob - prevprob = 9.20877e-06
Convergence test: (sum - prevsum)/prevsum = 1.88458e-05
Probability of good choice for population of 1236=48.8655
prob - prevprob = 9.18641e-06
Convergence test: (sum - prevsum)/prevsum = 1.87997e-05
Probability of good choice for population of 1238=48.8664
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prob - prevprob = 9.16415e-06
Convergence test: (sum - prevsum)/prevsum = 1.87538e-05
Probability of good choice for population of 1240=48.8673
prob - prevprob = 9.14198e-06
Convergence test: (sum - prevsum)/prevsum = 1.87081e-05
Probability of good choice for population of 1242=48.8682
prob - prevprob = 9.1199e-06
Convergence test: (sum - prevsum)/prevsum = 1.86626e-05
Probability of good choice for population of 1244=48.8691
prob - prevprob = 9.09791e-06
Convergence test: (sum - prevsum)/prevsum = 1.86172e-05
Probability of good choice for population of 1246=48.87
prob - prevprob = 9.076e-06
Convergence test: (sum - prevsum)/prevsum = 1.85721e-05
Probability of good choice for population of 1248=48.8709
prob - prevprob = 9.05418e-06
Convergence test: (sum - prevsum)/prevsum = 1.85271e-05
Probability of good choice for population of 1250=48.8718
prob - prevprob = 9.03245e-06
Convergence test: (sum - prevsum)/prevsum = 1.84823e-05
Probability of good choice for population of 1252=48.8727
prob - prevprob = 9.01081e-06
Convergence test: (sum - prevsum)/prevsum = 1.84376e-05
Probability of good choice for population of 1254=48.8736
prob - prevprob = 8.98925e-06
Convergence test: (sum - prevsum)/prevsum = 1.83932e-05
Probability of good choice for population of 1256=48.8745
prob - prevprob = 8.96778e-06
Convergence test: (sum - prevsum)/prevsum = 1.83489e-05
Probability of good choice for population of 1258=48.8754
prob - prevprob = 8.9464e-06
Convergence test: (sum - prevsum)/prevsum = 1.83048e-05
Probability of good choice for population of 1260=48.8763
prob - prevprob = 8.9251e-06
Convergence test: (sum - prevsum)/prevsum = 1.82609e-05
Probability of good choice for population of 1262=48.8772
prob - prevprob = 8.90388e-06
Convergence test: (sum - prevsum)/prevsum = 1.82172e-05
Probability of good choice for population of 1264=48.8781
prob - prevprob = 8.88275e-06
Convergence test: (sum - prevsum)/prevsum = 1.81736e-05
Probability of good choice for population of 1266=48.879
prob - prevprob = 8.8617e-06
Convergence test: (sum - prevsum)/prevsum = 1.81302e-05
Probability of good choice for population of 1268=48.8799
prob - prevprob = 8.84073e-06
Convergence test: (sum - prevsum)/prevsum = 1.8087e-05
Probability of good choice for population of 1270=48.8808
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prob - prevprob = 8.81985e-06
Convergence test: (sum - prevsum)/prevsum = 1.80439e-05
Probability of good choice for population of 1272=48.8816
prob - prevprob = 8.79905e-06
Convergence test: (sum - prevsum)/prevsum = 1.8001e-05
Probability of good choice for population of 1274=48.8825
prob - prevprob = 8.77833e-06
Convergence test: (sum - prevsum)/prevsum = 1.79583e-05
Probability of good choice for population of 1276=48.8834
prob - prevprob = 8.75769e-06
Convergence test: (sum - prevsum)/prevsum = 1.79158e-05
Probability of good choice for population of 1278=48.8843
prob - prevprob = 8.73713e-06
Convergence test: (sum - prevsum)/prevsum = 1.78734e-05
Probability of good choice for population of 1280=48.8851
prob - prevprob = 8.71665e-06
Convergence test: (sum - prevsum)/prevsum = 1.78312e-05
Probability of good choice for population of 1282=48.886
prob - prevprob = 8.69625e-06
Convergence test: (sum - prevsum)/prevsum = 1.77892e-05
Probability of good choice for population of 1284=48.8869
prob - prevprob = 8.67594e-06
Convergence test: (sum - prevsum)/prevsum = 1.77473e-05
Probability of good choice for population of 1286=48.8877
prob - prevprob = 8.6557e-06
Convergence test: (sum - prevsum)/prevsum = 1.77056e-05
Probability of good choice for population of 1288=48.8886
prob - prevprob = 8.63554e-06
Convergence test: (sum - prevsum)/prevsum = 1.7664e-05
Probability of good choice for population of 1290=48.8895
prob - prevprob = 8.61545e-06
Convergence test: (sum - prevsum)/prevsum = 1.76226e-05
Probability of good choice for population of 1292=48.8903
prob - prevprob = 8.59545e-06
Convergence test: (sum - prevsum)/prevsum = 1.75814e-05
Probability of good choice for population of 1294=48.8912
prob - prevprob = 8.57552e-06
Convergence test: (sum - prevsum)/prevsum = 1.75403e-05
Probability of good choice for population of 1296=48.892
prob - prevprob = 8.55567e-06
Convergence test: (sum - prevsum)/prevsum = 1.74994e-05
Probability of good choice for population of 1298=48.8929
prob - prevprob = 8.5359e-06
Convergence test: (sum - prevsum)/prevsum = 1.74587e-05
Probability of good choice for population of 1300=48.8937
prob - prevprob = 8.5162e-06
Convergence test: (sum - prevsum)/prevsum = 1.74181e-05
Probability of good choice for population of 1302=48.8946
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prob - prevprob = 8.49657e-06
Convergence test: (sum - prevsum)/prevsum = 1.73776e-05
Probability of good choice for population of 1304=48.8954
prob - prevprob = 8.47703e-06
Convergence test: (sum - prevsum)/prevsum = 1.73374e-05
Probability of good choice for population of 1306=48.8963
prob - prevprob = 8.45756e-06
Convergence test: (sum - prevsum)/prevsum = 1.72972e-05
Probability of good choice for population of 1308=48.8971
prob - prevprob = 8.43816e-06
Convergence test: (sum - prevsum)/prevsum = 1.72573e-05
Probability of good choice for population of 1310=48.898
prob - prevprob = 8.41883e-06
Convergence test: (sum - prevsum)/prevsum = 1.72174e-05
Probability of good choice for population of 1312=48.8988
prob - prevprob = 8.39958e-06
Convergence test: (sum - prevsum)/prevsum = 1.71778e-05
Probability of good choice for population of 1314=48.8997
prob - prevprob = 8.38041e-06
Convergence test: (sum - prevsum)/prevsum = 1.71383e-05
Probability of good choice for population of 1316=48.9005
prob - prevprob = 8.3613e-06
Convergence test: (sum - prevsum)/prevsum = 1.70989e-05
Probability of good choice for population of 1318=48.9013
prob - prevprob = 8.34227e-06
Convergence test: (sum - prevsum)/prevsum = 1.70597e-05
Probability of good choice for population of 1320=48.9022
prob - prevprob = 8.32331e-06
Convergence test: (sum - prevsum)/prevsum = 1.70206e-05
Probability of good choice for population of 1322=48.903
prob - prevprob = 8.30442e-06
Convergence test: (sum - prevsum)/prevsum = 1.69817e-05
Probability of good choice for population of 1324=48.9038
prob - prevprob = 8.2856e-06
Convergence test: (sum - prevsum)/prevsum = 1.69429e-05
Probability of good choice for population of 1326=48.9046
prob - prevprob = 8.26686e-06
Convergence test: (sum - prevsum)/prevsum = 1.69043e-05
Probability of good choice for population of 1328=48.9055
prob - prevprob = 8.24818e-06
Convergence test: (sum - prevsum)/prevsum = 1.68659e-05
Probability of good choice for population of 1330=48.9063
prob - prevprob = 8.22958e-06
Convergence test: (sum - prevsum)/prevsum = 1.68275e-05
Probability of good choice for population of 1332=48.9071
prob - prevprob = 8.21104e-06
Convergence test: (sum - prevsum)/prevsum = 1.67893e-05
Probability of good choice for population of 1334=48.9079
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prob - prevprob = 8.19258e-06
Convergence test: (sum - prevsum)/prevsum = 1.67513e-05
Probability of good choice for population of 1336=48.9087
prob - prevprob = 8.17418e-06
Convergence test: (sum - prevsum)/prevsum = 1.67134e-05
Probability of good choice for population of 1338=48.9096
prob - prevprob = 8.15585e-06
Convergence test: (sum - prevsum)/prevsum = 1.66757e-05
Probability of good choice for population of 1340=48.9104
prob - prevprob = 8.13759e-06
Convergence test: (sum - prevsum)/prevsum = 1.6638e-05
Probability of good choice for population of 1342=48.9112
prob - prevprob = 8.1194e-06
Convergence test: (sum - prevsum)/prevsum = 1.66006e-05
Probability of good choice for population of 1344=48.912
prob - prevprob = 8.10128e-06
Convergence test: (sum - prevsum)/prevsum = 1.65632e-05
Probability of good choice for population of 1346=48.9128
prob - prevprob = 8.08322e-06
Convergence test: (sum - prevsum)/prevsum = 1.65261e-05
Probability of good choice for population of 1348=48.9136
prob - prevprob = 8.06523e-06
Convergence test: (sum - prevsum)/prevsum = 1.6489e-05
Probability of good choice for population of 1350=48.9144
prob - prevprob = 8.04731e-06
Convergence test: (sum - prevsum)/prevsum = 1.64521e-05
Probability of good choice for population of 1352=48.9152
prob - prevprob = 8.02945e-06
Convergence test: (sum - prevsum)/prevsum = 1.64153e-05
Probability of good choice for population of 1354=48.916
prob - prevprob = 8.01166e-06
Convergence test: (sum - prevsum)/prevsum = 1.63787e-05
Probability of good choice for population of 1356=48.9168
prob - prevprob = 7.99394e-06
Convergence test: (sum - prevsum)/prevsum = 1.63422e-05
Probability of good choice for population of 1358=48.9176
prob - prevprob = 7.97628e-06
Convergence test: (sum - prevsum)/prevsum = 1.63058e-05
Probability of good choice for population of 1360=48.9184
prob - prevprob = 7.95869e-06
Convergence test: (sum - prevsum)/prevsum = 1.62696e-05
Probability of good choice for population of 1362=48.9192
prob - prevprob = 7.94115e-06
Convergence test: (sum - prevsum)/prevsum = 1.62335e-05
Probability of good choice for population of 1364=48.92
prob - prevprob = 7.92369e-06
Convergence test: (sum - prevsum)/prevsum = 1.61975e-05
Probability of good choice for population of 1366=48.9208
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prob - prevprob = 7.90629e-06
Convergence test: (sum - prevsum)/prevsum = 1.61617e-05
Probability of good choice for population of 1368=48.9216
prob - prevprob = 7.88895e-06
Convergence test: (sum - prevsum)/prevsum = 1.6126e-05
Probability of good choice for population of 1370=48.9224
prob - prevprob = 7.87167e-06
Convergence test: (sum - prevsum)/prevsum = 1.60904e-05
Probability of good choice for population of 1372=48.9232
prob - prevprob = 7.85446e-06
Convergence test: (sum - prevsum)/prevsum = 1.60549e-05
Probability of good choice for population of 1374=48.9239
prob - prevprob = 7.83731e-06
Convergence test: (sum - prevsum)/prevsum = 1.60196e-05
Probability of good choice for population of 1376=48.9247
prob - prevprob = 7.82022e-06
Convergence test: (sum - prevsum)/prevsum = 1.59845e-05
Probability of good choice for population of 1378=48.9255
prob - prevprob = 7.8032e-06
Convergence test: (sum - prevsum)/prevsum = 1.59494e-05
Probability of good choice for population of 1380=48.9263
prob - prevprob = 7.78624e-06
Convergence test: (sum - prevsum)/prevsum = 1.59145e-05
Probability of good choice for population of 1382=48.9271
prob - prevprob = 7.76933e-06
Convergence test: (sum - prevsum)/prevsum = 1.58797e-05
Probability of good choice for population of 1384=48.9278
prob - prevprob = 7.75249e-06
Convergence test: (sum - prevsum)/prevsum = 1.5845e-05
Probability of good choice for population of 1386=48.9286
prob - prevprob = 7.73571e-06
Convergence test: (sum - prevsum)/prevsum = 1.58105e-05
Probability of good choice for population of 1388=48.9294
prob - prevprob = 7.71899e-06
Convergence test: (sum - prevsum)/prevsum = 1.5776e-05
Probability of good choice for population of 1390=48.9301
prob - prevprob = 7.70233e-06
Convergence test: (sum - prevsum)/prevsum = 1.57417e-05
Probability of good choice for population of 1392=48.9309
prob - prevprob = 7.68573e-06
Convergence test: (sum - prevsum)/prevsum = 1.57076e-05
Probability of good choice for population of 1394=48.9317
prob - prevprob = 7.66919e-06
Convergence test: (sum - prevsum)/prevsum = 1.56735e-05
Probability of good choice for population of 1396=48.9324
prob - prevprob = 7.65271e-06
Convergence test: (sum - prevsum)/prevsum = 1.56396e-05
Probability of good choice for population of 1398=48.9332
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prob - prevprob = 7.63629e-06
Convergence test: (sum - prevsum)/prevsum = 1.56058e-05
Probability of good choice for population of 1400=48.934
prob - prevprob = 7.61993e-06
Convergence test: (sum - prevsum)/prevsum = 1.55721e-05
Probability of good choice for population of 1402=48.9347
prob - prevprob = 7.60362e-06
Convergence test: (sum - prevsum)/prevsum = 1.55385e-05
Probability of good choice for population of 1404=48.9355
prob - prevprob = 7.58737e-06
Convergence test: (sum - prevsum)/prevsum = 1.55051e-05
Probability of good choice for population of 1406=48.9362
prob - prevprob = 7.57119e-06
Convergence test: (sum - prevsum)/prevsum = 1.54718e-05
Probability of good choice for population of 1408=48.937
prob - prevprob = 7.55505e-06
Convergence test: (sum - prevsum)/prevsum = 1.54386e-05
Probability of good choice for population of 1410=48.9378
prob - prevprob = 7.53898e-06
Convergence test: (sum - prevsum)/prevsum = 1.54055e-05
Probability of good choice for population of 1412=48.9385
prob - prevprob = 7.52296e-06
Convergence test: (sum - prevsum)/prevsum = 1.53725e-05
Probability of good choice for population of 1414=48.9393
prob - prevprob = 7.507e-06
Convergence test: (sum - prevsum)/prevsum = 1.53397e-05
Probability of good choice for population of 1416=48.94
prob - prevprob = 7.4911e-06
Convergence test: (sum - prevsum)/prevsum = 1.53069e-05
Probability of good choice for population of 1418=48.9408
prob - prevprob = 7.47525e-06
Convergence test: (sum - prevsum)/prevsum = 1.52743e-05
Probability of good choice for population of 1420=48.9415
prob - prevprob = 7.45945e-06
Convergence test: (sum - prevsum)/prevsum = 1.52418e-05
Probability of good choice for population of 1422=48.9422
prob - prevprob = 7.44372e-06
Convergence test: (sum - prevsum)/prevsum = 1.52094e-05
Probability of good choice for population of 1424=48.943
prob - prevprob = 7.42803e-06
Convergence test: (sum - prevsum)/prevsum = 1.51771e-05
Probability of good choice for population of 1426=48.9437
prob - prevprob = 7.41241e-06
Convergence test: (sum - prevsum)/prevsum = 1.5145e-05
Probability of good choice for population of 1428=48.9445
prob - prevprob = 7.39684e-06
Convergence test: (sum - prevsum)/prevsum = 1.51129e-05
Probability of good choice for population of 1430=48.9452
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prob - prevprob = 7.38132e-06
Convergence test: (sum - prevsum)/prevsum = 1.5081e-05
Probability of good choice for population of 1432=48.9459
prob - prevprob = 7.36585e-06
Convergence test: (sum - prevsum)/prevsum = 1.50492e-05
Probability of good choice for population of 1434=48.9467
prob - prevprob = 7.35044e-06
Convergence test: (sum - prevsum)/prevsum = 1.50175e-05
Probability of good choice for population of 1436=48.9474
prob - prevprob = 7.33509e-06
Convergence test: (sum - prevsum)/prevsum = 1.49859e-05
Probability of good choice for population of 1438=48.9481
prob - prevprob = 7.31979e-06
Convergence test: (sum - prevsum)/prevsum = 1.49544e-05
Probability of good choice for population of 1440=48.9489
prob - prevprob = 7.30454e-06
Convergence test: (sum - prevsum)/prevsum = 1.4923e-05
Probability of good choice for population of 1442=48.9496
prob - prevprob = 7.28934e-06
Convergence test: (sum - prevsum)/prevsum = 1.48917e-05
Probability of good choice for population of 1444=48.9503
prob - prevprob = 7.2742e-06
Convergence test: (sum - prevsum)/prevsum = 1.48606e-05
Probability of good choice for population of 1446=48.9511
prob - prevprob = 7.2591e-06
Convergence test: (sum - prevsum)/prevsum = 1.48295e-05
Probability of good choice for population of 1448=48.9518
prob - prevprob = 7.24406e-06
Convergence test: (sum - prevsum)/prevsum = 1.47986e-05
Probability of good choice for population of 1450=48.9525
prob - prevprob = 7.22908e-06
Convergence test: (sum - prevsum)/prevsum = 1.47677e-05
Probability of good choice for population of 1452=48.9532
prob - prevprob = 7.21414e-06
Convergence test: (sum - prevsum)/prevsum = 1.4737e-05
Probability of good choice for population of 1454=48.9539
prob - prevprob = 7.19926e-06
Convergence test: (sum - prevsum)/prevsum = 1.47064e-05
Probability of good choice for population of 1456=48.9547
prob - prevprob = 7.18442e-06
Convergence test: (sum - prevsum)/prevsum = 1.46759e-05
Probability of good choice for population of 1458=48.9554
prob - prevprob = 7.16964e-06
Convergence test: (sum - prevsum)/prevsum = 1.46455e-05
Probability of good choice for population of 1460=48.9561
prob - prevprob = 7.15491e-06
Convergence test: (sum - prevsum)/prevsum = 1.46152e-05
Probability of good choice for population of 1462=48.9568
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prob - prevprob = 7.14023e-06
Convergence test: (sum - prevsum)/prevsum = 1.4585e-05
Probability of good choice for population of 1464=48.9575
prob - prevprob = 7.12559e-06
Convergence test: (sum - prevsum)/prevsum = 1.45549e-05
Probability of good choice for population of 1466=48.9582
prob - prevprob = 7.11101e-06
Convergence test: (sum - prevsum)/prevsum = 1.45249e-05
Probability of good choice for population of 1468=48.9589
prob - prevprob = 7.09648e-06
Convergence test: (sum - prevsum)/prevsum = 1.4495e-05
Probability of good choice for population of 1470=48.9597
prob - prevprob = 7.082e-06
Convergence test: (sum - prevsum)/prevsum = 1.44652e-05
Probability of good choice for population of 1472=48.9604
prob - prevprob = 7.06756e-06
Convergence test: (sum - prevsum)/prevsum = 1.44355e-05
Probability of good choice for population of 1474=48.9611
prob - prevprob = 7.05318e-06
Convergence test: (sum - prevsum)/prevsum = 1.44059e-05
Probability of good choice for population of 1476=48.9618
prob - prevprob = 7.03884e-06
Convergence test: (sum - prevsum)/prevsum = 1.43764e-05
Probability of good choice for population of 1478=48.9625
prob - prevprob = 7.02456e-06
Convergence test: (sum - prevsum)/prevsum = 1.4347e-05
Probability of good choice for population of 1480=48.9632
prob - prevprob = 7.01032e-06
Convergence test: (sum - prevsum)/prevsum = 1.43177e-05
Probability of good choice for population of 1482=48.9639
prob - prevprob = 6.99613e-06
Convergence test: (sum - prevsum)/prevsum = 1.42885e-05
Probability of good choice for population of 1484=48.9646
prob - prevprob = 6.98198e-06
Convergence test: (sum - prevsum)/prevsum = 1.42595e-05
Probability of good choice for population of 1486=48.9653
prob - prevprob = 6.96789e-06
Convergence test: (sum - prevsum)/prevsum = 1.42305e-05
Probability of good choice for population of 1488=48.966
prob - prevprob = 6.95384e-06
Convergence test: (sum - prevsum)/prevsum = 1.42016e-05
Probability of good choice for population of 1490=48.9667
prob - prevprob = 6.93984e-06
Convergence test: (sum - prevsum)/prevsum = 1.41728e-05
Probability of good choice for population of 1492=48.9674
prob - prevprob = 6.92588e-06
Convergence test: (sum - prevsum)/prevsum = 1.41441e-05
Probability of good choice for population of 1494=48.968
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```
prob - prevprob = 6.91198e-06
Convergence test: (sum - prevsum)/prevsum = 1.41155e-05
Probability of good choice for population of 1496=48.9687
prob - prevprob = 6.89812e-06
Convergence test: (sum - prevsum)/prevsum = 1.4087e-05
Probability of good choice for population of 1498=48.9694
prob - prevprob = 6.8843e-06
Convergence test: (sum - prevsum)/prevsum = 1.40586e-05
Probability of good choice for population of 1500=48.9701
prob - prevprob = 6.87053e-06
Convergence test: (sum - prevsum)/prevsum = 1.40303e-05
Probability of good choice for population of 1502=48.9708
prob - prevprob = 6.85681e-06
Convergence test: (sum - prevsum)/prevsum = 1.4002e-05
Probability of good choice for population of 1504=48.9715
prob - prevprob = 6.84313e-06
Convergence test: (sum - prevsum)/prevsum = 1.39739e-05
Probability of good choice for population of 1506=48.9722
prob - prevprob = 6.8295e-06
Convergence test: (sum - prevsum)/prevsum = 1.39459e-05
Probability of good choice for population of 1508=48.9728
prob - prevprob = 6.81591e-06
Convergence test: (sum - prevsum)/prevsum = 1.39179e-05
Probability of good choice for population of 1510=48.9735
prob - prevprob = 6.80237e-06
Convergence test: (sum - prevsum)/prevsum = 1.38901e-05
Probability of good choice for population of 1512=48.9742
prob - prevprob = 6.78888e-06
Convergence test: (sum - prevsum)/prevsum = 1.38623e-05
Probability of good choice for population of 1514=48.9749
prob - prevprob = 6.77542e-06
Convergence test: (sum - prevsum)/prevsum = 1.38347e-05
Probability of good choice for population of 1516=48.9756
prob - prevprob = 6.76202e-06
Convergence test: (sum - prevsum)/prevsum = 1.38071e-05
Probability of good choice for population of 1518=48.9762
prob - prevprob = 6.74865e-06
Convergence test: (sum - prevsum)/prevsum = 1.37796e-05
Probability of good choice for population of 1520=48.9769
prob - prevprob = 6.73533e-06
Convergence test: (sum - prevsum)/prevsum = 1.37522e-05
Probability of good choice for population of 1522=48.9776
prob - prevprob = 6.72206e-06
Convergence test: (sum - prevsum)/prevsum = 1.3725e-05
Probability of good choice for population of 1524=48.9782
prob - prevprob = 6.70882e-06
Convergence test: (sum - prevsum)/prevsum = 1.36977e-05
Probability of good choice for population of 1526=48.9789
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```
prob - prevprob = 6.69564e-06
Convergence test: (sum - prevsum)/prevsum = 1.36706e-05
Probability of good choice for population of 1528=48.9796
prob - prevprob = 6.68249e-06
Convergence test: (sum - prevsum)/prevsum = 1.36436e-05
Probability of good choice for population of 1530=48.9803
prob - prevprob = 6.66939e-06
Convergence test: (sum - prevsum)/prevsum = 1.36167e-05
Probability of good choice for population of 1532=48.9809
prob - prevprob = 6.65633e-06
Convergence test: (sum - prevsum)/prevsum = 1.35898e-05
Probability of good choice for population of 1534=48.9816
prob - prevprob = 6.64331e-06
Convergence test: (sum - prevsum)/prevsum = 1.35631e-05
Probability of good choice for population of 1536=48.9822
prob - prevprob = 6.63033e-06
Convergence test: (sum - prevsum)/prevsum = 1.35364e-05
Probability of good choice for population of 1538=48.9829
prob - prevprob = 6.6174e-06
Convergence test: (sum - prevsum)/prevsum = 1.35098e-05
Probability of good choice for population of 1540=48.9836
prob - prevprob = 6.60451e-06
Convergence test: (sum - prevsum)/prevsum = 1.34833e-05
Probability of good choice for population of 1542=48.9842
prob - prevprob = 6.59166e-06
Convergence test: (sum - prevsum)/prevsum = 1.34569e-05
Probability of good choice for population of 1544=48.9849
prob - prevprob = 6.57885e-06
Convergence test: (sum - prevsum)/prevsum = 1.34306e-05
Probability of good choice for population of 1546=48.9855
prob - prevprob = 6.56609e-06
Convergence test: (sum - prevsum)/prevsum = 1.34043e-05
Probability of good choice for population of 1548=48.9862
prob - prevprob = 6.55336e-06
Convergence test: (sum - prevsum)/prevsum = 1.33782e-05
Probability of good choice for population of 1550=48.9868
prob - prevprob = 6.54068e-06
Convergence test: (sum - prevsum)/prevsum = 1.33521e-05
Probability of good choice for population of 1552=48.9875
prob - prevprob = 6.52803e-06
Convergence test: (sum - prevsum)/prevsum = 1.33261e-05
Probability of good choice for population of 1554=48.9882
prob - prevprob = 6.51543e-06
Convergence test: (sum - prevsum)/prevsum = 1.33002e-05
Probability of good choice for population of 1556=48.9888
prob - prevprob = 6.50287e-06
Convergence test: (sum - prevsum)/prevsum = 1.32744e-05
Probability of good choice for population of 1558=48.9895
```

```
prob - prevprob = 6.49035e-06
Convergence test: (sum - prevsum)/prevsum = 1.32486e-05
Probability of good choice for population of 1560=48.9901
prob - prevprob = 6.47787e-06
Convergence test: (sum - prevsum)/prevsum = 1.3223e-05
Probability of good choice for population of 1562=48.9907
prob - prevprob = 6.46543e-06
Convergence test: (sum - prevsum)/prevsum = 1.31974e-05
Probability of good choice for population of 1564=48.9914
prob - prevprob = 6.45302e-06
Convergence test: (sum - prevsum)/prevsum = 1.31719e-05
Probability of good choice for population of 1566=48.992
prob - prevprob = 6.44066e-06
Convergence test: (sum - prevsum)/prevsum = 1.31465e-05
Probability of good choice for population of 1568=48.9927
prob - prevprob = 6.42834e-06
Convergence test: (sum - prevsum)/prevsum = 1.31212e-05
Probability of good choice for population of 1570=48.9933
prob - prevprob = 6.41606e-06
Convergence test: (sum - prevsum)/prevsum = 1.30959e-05
Probability of good choice for population of 1572=48.994
prob - prevprob = 6.40381e-06
Convergence test: (sum - prevsum)/prevsum = 1.30708e-05
Probability of good choice for population of 1574=48.9946
prob - prevprob = 6.39161e-06
Convergence test: (sum - prevsum)/prevsum = 1.30457e-05
Probability of good choice for population of 1576=48.9952
prob - prevprob = 6.37944e-06
Convergence test: (sum - prevsum)/prevsum = 1.30207e-05
Probability of good choice for population of 1578=48.9959
prob - prevprob = 6.36731e-06
Convergence test: (sum - prevsum)/prevsum = 1.29958e-05
Probability of good choice for population of 1580=48.9965
prob - prevprob = 6.35522e-06
Convergence test: (sum - prevsum)/prevsum = 1.29709e-05
Probability of good choice for population of 1582=48.9971
prob - prevprob = 6.34317e-06
Convergence test: (sum - prevsum)/prevsum = 1.29462e-05
Probability of good choice for population of 1584=48.9978
prob - prevprob = 6.33116e-06
Convergence test: (sum - prevsum)/prevsum = 1.29215e-05
Probability of good choice for population of 1586=48.9984
prob - prevprob = 6.31918e-06
Convergence test: (sum - prevsum)/prevsum = 1.28969e-05
Probability of good choice for population of 1588=48.999
prob - prevprob = 6.30724e-06
Convergence test: (sum - prevsum)/prevsum = 1.28723e-05
Probability of good choice for population of 1590=48.9997
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```
prob - prevprob = 6.29534e-06
Convergence test: (sum - prevsum)/prevsum = 1.28479e-05
Probability of good choice for population of 1592=49.0003
prob - prevprob = 6.28348e-06
Convergence test: (sum - prevsum)/prevsum = 1.28235e-05
Probability of good choice for population of 1594=49.0009
prob - prevprob = 6.27165e-06
Convergence test: (sum - prevsum)/prevsum = 1.27992e-05
Probability of good choice for population of 1596=49.0016
prob - prevprob = 6.25986e-06
Convergence test: (sum - prevsum)/prevsum = 1.2775e-05
Probability of good choice for population of 1598=49.0022
prob - prevprob = 6.24811e-06
Convergence test: (sum - prevsum)/prevsum = 1.27508e-05
Probability of good choice for population of 1600=49.0028
prob - prevprob = 6.2364e-06
Convergence test: (sum - prevsum)/prevsum = 1.27268e-05
Probability of good choice for population of 1602=49.0034
prob - prevprob = 6.22472e-06
Convergence test: (sum - prevsum)/prevsum = 1.27028e-05
Probability of good choice for population of 1604=49.004
prob - prevprob = 6.21308e-06
Convergence test: (sum - prevsum)/prevsum = 1.26789e-05
Probability of good choice for population of 1606=49.0047
prob - prevprob = 6.20147e-06
Convergence test: (sum - prevsum)/prevsum = 1.2655e-05
Probability of good choice for population of 1608=49.0053
prob - prevprob = 6.1899e-06
Convergence test: (sum - prevsum)/prevsum = 1.26312e-05
Probability of good choice for population of 1610=49.0059
prob - prevprob = 6.17837e-06
Convergence test: (sum - prevsum)/prevsum = 1.26076e-05
Probability of good choice for population of 1612=49.0065
prob - prevprob = 6.16687e-06
Convergence test: (sum - prevsum)/prevsum = 1.25839e-05
Probability of good choice for population of 1614=49.0071
prob - prevprob = 6.15541e-06
Convergence test: (sum - prevsum)/prevsum = 1.25604e-05
Probability of good choice for population of 1616=49.0077
prob - prevprob = 6.14398e-06
Convergence test: (sum - prevsum)/prevsum = 1.25369e-05
Probability of good choice for population of 1618=49.0084
prob - prevprob = 6.13259e-06
Convergence test: (sum - prevsum)/prevsum = 1.25135e-05
Probability of good choice for population of 1620=49.009
prob - prevprob = 6.12123e-06
Convergence test: (sum - prevsum)/prevsum = 1.24902e-05
Probability of good choice for population of 1622=49.0096
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```
prob - prevprob = 6.10991e-06
Convergence test: (sum - prevsum)/prevsum = 1.24669e-05
Probability of good choice for population of 1624=49.0102
prob - prevprob = 6.09862e-06
Convergence test: (sum - prevsum)/prevsum = 1.24437e-05
Probability of good choice for population of 1626=49.0108
prob - prevprob = 6.08737e-06
Convergence test: (sum - prevsum)/prevsum = 1.24206e-05
Probability of good choice for population of 1628=49.0114
prob - prevprob = 6.07615e-06
Convergence test: (sum - prevsum)/prevsum = 1.23976e-05
Probability of good choice for population of 1630=49.012
prob - prevprob = 6.06497e-06
Convergence test: (sum - prevsum)/prevsum = 1.23746e-05
Probability of good choice for population of 1632=49.0126
prob - prevprob = 6.05382e-06
Convergence test: (sum - prevsum)/prevsum = 1.23517e-05
Probability of good choice for population of 1634=49.0132
prob - prevprob = 6.04271e-06
Convergence test: (sum - prevsum)/prevsum = 1.23289e-05
Probability of good choice for population of 1636=49.0138
prob - prevprob = 6.03162e-06
Convergence test: (sum - prevsum)/prevsum = 1.23061e-05
Probability of good choice for population of 1638=49.0144
prob - prevprob = 6.02058e-06
Convergence test: (sum - prevsum)/prevsum = 1.22834e-05
Probability of good choice for population of 1640=49.015
prob - prevprob = 6.00956e-06
Convergence test: (sum - prevsum)/prevsum = 1.22608e-05
Probability of good choice for population of 1642=49.0156
prob - prevprob = 5.99858e-06
Convergence test: (sum - prevsum)/prevsum = 1.22383e-05
Probability of good choice for population of 1644=49.0162
prob - prevprob = 5.98764e-06
Convergence test: (sum - prevsum)/prevsum = 1.22158e-05
Probability of good choice for population of 1646=49.0168
prob - prevprob = 5.97673e-06
Convergence test: (sum - prevsum)/prevsum = 1.21934e-05
Probability of good choice for population of 1648=49.0174
prob - prevprob = 5.96585e-06
Convergence test: (sum - prevsum)/prevsum = 1.2171e-05
Probability of good choice for population of 1650=49.018
prob - prevprob = 5.955e-06
Convergence test: (sum - prevsum)/prevsum = 1.21487e-05
Probability of good choice for population of 1652=49.0186
prob - prevprob = 5.94418e-06
Convergence test: (sum - prevsum)/prevsum = 1.21265e-05
Probability of good choice for population of 1654=49.0192
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```
prob - prevprob = 5.9334e-06
Convergence test: (sum - prevsum)/prevsum = 1.21044e-05
Probability of good choice for population of 1656=49.0198
prob - prevprob = 5.92265e-06
Convergence test: (sum - prevsum)/prevsum = 1.20823e-05
Probability of good choice for population of 1658=49.0204
prob - prevprob = 5.91194e-06
Convergence test: (sum - prevsum)/prevsum = 1.20603e-05
Probability of good choice for population of 1660=49.021
prob - prevprob = 5.90125e-06
Convergence test: (sum - prevsum)/prevsum = 1.20384e-05
Probability of good choice for population of 1662=49.0216
prob - prevprob = 5.8906e-06
Convergence test: (sum - prevsum)/prevsum = 1.20165e-05
Probability of good choice for population of 1664=49.0222
prob - prevprob = 5.87998e-06
Convergence test: (sum - prevsum)/prevsum = 1.19947e-05
Probability of good choice for population of 1666=49.0227
prob - prevprob = 5.86939e-06
Convergence test: (sum - prevsum)/prevsum = 1.19729e-05
Probability of good choice for population of 1668=49.0233
prob - prevprob = 5.85884e-06
Convergence test: (sum - prevsum)/prevsum = 1.19513e-05
Probability of good choice for population of 1670=49.0239
prob - prevprob = 5.84831e-06
Convergence test: (sum - prevsum)/prevsum = 1.19296e-05
Probability of good choice for population of 1672=49.0245
prob - prevprob = 5.83782e-06
Convergence test: (sum - prevsum)/prevsum = 1.19081e-05
Probability of good choice for population of 1674=49.0251
prob - prevprob = 5.82736e-06
Convergence test: (sum - prevsum)/prevsum = 1.18866e-05
Probability of good choice for population of 1676=49.0257
prob - prevprob = 5.81693e-06
Convergence test: (sum - prevsum)/prevsum = 1.18652e-05
Probability of good choice for population of 1678=49.0262
prob - prevprob = 5.80653e-06
Convergence test: (sum - prevsum)/prevsum = 1.18438e-05
Probability of good choice for population of 1680=49.0268
prob - prevprob = 5.79616e-06
Convergence test: (sum - prevsum)/prevsum = 1.18226e-05
Probability of good choice for population of 1682=49.0274
prob - prevprob = 5.78582e-06
Convergence test: (sum - prevsum)/prevsum = 1.18013e-05
Probability of good choice for population of 1684=49.028
prob - prevprob = 5.77551e-06
Convergence test: (sum - prevsum)/prevsum = 1.17802e-05
Probability of good choice for population of 1686=49.0286
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```
prob - prevprob = 5.76523e-06
Convergence test: (sum - prevsum)/prevsum = 1.17591e-05
Probability of good choice for population of 1688=49.0291
prob - prevprob = 5.75499e-06
Convergence test: (sum - prevsum)/prevsum = 1.1738e-05
Probability of good choice for population of 1690=49.0297
prob - prevprob = 5.74477e-06
Convergence test: (sum - prevsum)/prevsum = 1.17171e-05
Probability of good choice for population of 1692=49.0303
prob - prevprob = 5.73459e-06
Convergence test: (sum - prevsum)/prevsum = 1.16961e-05
Probability of good choice for population of 1694=49.0309
prob - prevprob = 5.72443e-06
Convergence test: (sum - prevsum)/prevsum = 1.16753e-05
Probability of good choice for population of 1696=49.0314
prob - prevprob = 5.71431e-06
Convergence test: (sum - prevsum)/prevsum = 1.16545e-05
Probability of good choice for population of 1698=49.032
prob - prevprob = 5.70421e-06
Convergence test: (sum - prevsum)/prevsum = 1.16338e-05
Probability of good choice for population of 1700=49.0326
prob - prevprob = 5.69414e-06
Convergence test: (sum - prevsum)/prevsum = 1.16131e-05
Probability of good choice for population of 1702=49.0331
prob - prevprob = 5.68411e-06
Convergence test: (sum - prevsum)/prevsum = 1.15925e-05
Probability of good choice for population of 1704=49.0337
prob - prevprob = 5.6741e-06
Convergence test: (sum - prevsum)/prevsum = 1.1572e-05
Probability of good choice for population of 1706=49.0343
prob - prevprob = 5.66412e-06
Convergence test: (sum - prevsum)/prevsum = 1.15515e-05
Probability of good choice for population of 1708=49.0348
prob - prevprob = 5.65417e-06
Convergence test: (sum - prevsum)/prevsum = 1.15311e-05
Probability of good choice for population of 1710=49.0354
prob - prevprob = 5.64425e-06
Convergence test: (sum - prevsum)/prevsum = 1.15107e-05
Probability of good choice for population of 1712=49.036
prob - prevprob = 5.63436e-06
Convergence test: (sum - prevsum)/prevsum = 1.14904e-05
Probability of good choice for population of 1714=49.0365
prob - prevprob = 5.6245e-06
Convergence test: (sum - prevsum)/prevsum = 1.14702e-05
Probability of good choice for population of 1716=49.0371
prob - prevprob = 5.61467e-06
Convergence test: (sum - prevsum)/prevsum = 1.145e-05
Probability of good choice for population of 1718=49.0376
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```
prob - prevprob = 5.60486e-06
Convergence test: (sum - prevsum)/prevsum = 1.14298e-05
Probability of good choice for population of 1720=49.0382
prob - prevprob = 5.59509e-06
Convergence test: (sum - prevsum)/prevsum = 1.14098e-05
Probability of good choice for population of 1722=49.0388
prob - prevprob = 5.58534e-06
Convergence test: (sum - prevsum)/prevsum = 1.13898e-05
Probability of good choice for population of 1724=49.0393
prob - prevprob = 5.57562e-06
Convergence test: (sum - prevsum)/prevsum = 1.13698e-05
Probability of good choice for population of 1726=49.0399
prob - prevprob = 5.56593e-06
Convergence test: (sum - prevsum)/prevsum = 1.13499e-05
Probability of good choice for population of 1728=49.0404
prob - prevprob = 5.55627e-06
Convergence test: (sum - prevsum)/prevsum = 1.13301e-05
Probability of good choice for population of 1730=49.041
prob - prevprob = 5.54663e-06
Convergence test: (sum - prevsum)/prevsum = 1.13103e-05
Probability of good choice for population of 1732=49.0415
prob - prevprob = 5.53702e-06
Convergence test: (sum - prevsum)/prevsum = 1.12906e-05
Probability of good choice for population of 1734=49.0421
prob - prevprob = 5.52744e-06
Convergence test: (sum - prevsum)/prevsum = 1.12709e-05
Probability of good choice for population of 1736=49.0426
prob - prevprob = 5.51789e-06
Convergence test: (sum - prevsum)/prevsum = 1.12513e-05
Probability of good choice for population of 1738=49.0432
prob - prevprob = 5.50837e-06
Convergence test: (sum - prevsum)/prevsum = 1.12318e-05
Probability of good choice for population of 1740=49.0437
prob - prevprob = 5.49887e-06
Convergence test: (sum - prevsum)/prevsum = 1.12123e-05
Probability of good choice for population of 1742=49.0443
prob - prevprob = 5.4894e-06
Convergence test: (sum - prevsum)/prevsum = 1.11929e-05
Probability of good choice for population of 1744=49.0448
prob - prevprob = 5.47996e-06
Convergence test: (sum - prevsum)/prevsum = 1.11735e-05
Probability of good choice for population of 1746=49.0454
prob - prevprob = 5.47054e-06
Convergence test: (sum - prevsum)/prevsum = 1.11542e-05
Probability of good choice for population of 1748=49.0459
prob - prevprob = 5.46115e-06
Convergence test: (sum - prevsum)/prevsum = 1.11349e-05
Probability of good choice for population of 1750=49.0465
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```
prob - prevprob = 5.45179e-06
Convergence test: (sum - prevsum)/prevsum = 1.11157e-05
Probability of good choice for population of 1752=49.047
prob - prevprob = 5.44246e-06
Convergence test: (sum - prevsum)/prevsum = 1.10965e-05
Probability of good choice for population of 1754=49.0476
prob - prevprob = 5.43315e-06
Convergence test: (sum - prevsum)/prevsum = 1.10774e-05
Probability of good choice for population of 1756=inf
prob - prevprob = inf
Convergence test: (sum - prevsum)/prevsum = inf
Probability of good choice for population of 1758=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1760=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1762=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1764=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1766=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1768=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1770=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1772=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1774=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1776=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1778=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1780=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1782=inf
```

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prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1784=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1786=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1788=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1790=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1792=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1794=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1796=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1798=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1800=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1802=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1804=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1806=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1808=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1810=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1812=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1814=inf
```

```
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1816=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1818=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1820=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1822=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1824=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1826=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1828=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1830=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1832=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1834=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1836=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1838=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1840=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1842=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1844=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1846=inf
```

```
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1848=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1850=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1852=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1854=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1856=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1858=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1860=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1862=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1864=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1866=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1868=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1870=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1872=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1874=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1876=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1878=inf
```

```
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1880=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1882=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1884=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1886=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1888=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1890=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1892=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1894=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1896=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1898=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1900=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1902=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1904=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1906=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1908=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1910=inf
```

```
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1912=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1914=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1916=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1918=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1920=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1922=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1924=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1926=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1928=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1930=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1932=inf
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1934=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1936=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1938=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1940=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1942=-nan
```

```
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1944=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1946=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1948=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1950=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1952=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1954=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1956=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1958=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1960=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1962=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1964=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1966=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1968=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1970=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1972=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1974=-nan
```

```
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1976=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1978=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1980=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1982=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1984=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1986=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1988=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1990=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1992=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1994=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1996=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 1998=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2000=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2002=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2004=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2006=-nan
```

```
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2008=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2010=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2012=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2014=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2016=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2018=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2020=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2022=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2024=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2026=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2028=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2030=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2032=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2034=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2036=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2038=-nan
```

```
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2040=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2042=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2044=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2046=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2048=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2050=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2052=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2054=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2056=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2058=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2060=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2062=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2064=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2066=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2068=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2070=-nan
```

```
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2072=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2074=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2076=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2078=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2080=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2082=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2084=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2086=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2088=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2090=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2092=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2094=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2096=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2098=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2100=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2102=-nan
```

```
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2104=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2106=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2108=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2110=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2112=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2114=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2116=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2118=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2120=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2122=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2124=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2126=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2128=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2130=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2132=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2134=-nan
```

```
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2136=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2138=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2140=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2142=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2144=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2146=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2148=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2150=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2152=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2154=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2156=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2158=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2160=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2162=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2164=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2166=-nan
```

```
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2168=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2170=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2172=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2174=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2176=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2178=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2180=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2182=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2184=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2186=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2188=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2190=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2192=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2194=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2196=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2198=-nan
```

```
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2200=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2202=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2204=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2206=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2208=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2210=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2212=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2214=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2216=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2218=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2220=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2222=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2224=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2226=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2228=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2230=-nan
```

```
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2232=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2234=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2236=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2238=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2240=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2242=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2244=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2246=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2248=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2250=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2252=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2254=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2256=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2258=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2260=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2262=-nan
```

```
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2264=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2266=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2268=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2270=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2272=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2274=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2276=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2278=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2280=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2282=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2284=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2286=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2288=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2290=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2292=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2294=-nan
```

```
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2296=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2298=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2300=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2302=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2304=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2306=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2308=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2310=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2312=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2314=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2316=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2318=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2320=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2322=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2324=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2326=-nan
```

```
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2328=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2330=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2332=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2334=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2336=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2338=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2340=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2342=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2344=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2346=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2348=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2350=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2352=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2354=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2356=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2358=-nan
```

```
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2360=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2362=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2364=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2366=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2368=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2370=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2372=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2374=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2376=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2378=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2380=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2382=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2384=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2386=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2388=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2390=-nan
```

```
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2392=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2394=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2396=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2398=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2400=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2402=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2404=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2406=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2408=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2410=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2412=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2414=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2416=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2418=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2420=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2422=-nan
```

```
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2424=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2426=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2428=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2430=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2432=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2434=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2436=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2438=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2440=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2442=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2444=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
Probability of good choice for population of 2446=-nan
prob - prevprob = -nan
Convergence test: (sum - prevsum)/prevsum = -nan
```

## 6 Acknowledgement

I dedicate this article to God.

# 7 Bibliography

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