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Techniques for Counting Prime Constellations between P(n) and P(n)^2

This paper presents formulae which calculate the number of occurrences of prime constellations between P(n) and P(n)^2

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This paper presents formulae which calculate the number of occurrences of prime constellations between P(n) and P(n)^2. Next it is shown that the error between these formulae and the actual number of the given constellations stabilizes at low error rates for large n. Finally the formulae are decomposed in such a way as to demonstrate why the constellations occur infinitely. Moreover it will be demonstrated that the number of the constellations increases between P(n) and P(n)^2 for larger n,

1. Introduction

This work is a further work based on top of research into Pat(2n+1,n). Further details can be found here [1].

1.1. P(n)
P(n) := *P*(1) = 3, *P*(2)=5, *P*(3)=7, …

1.2. P(n)# - Primorial
P(n)# = *primorial*(n) = *P*(n)**P*(n-1)*…**P*(1)

1.3. Pat(2n+1,n)
This recursive pattern is the patter which lays down the primes over the number line. More details can be found at:
http://www.rankyouragent.com/primes/primes_simple.htm
However, a quick definition is offered here:
1.3.1. Pat(f(n),n)
Pat(f(n)) = Pat(f(n-1) merge Elemental(f(f0)) where
Pat(0) is the empty pattern,
f0 is the location (1 based) of the first zero in the lhs pattern, and
f(n) is some function (f(n) = 2n+1 for this paper).

1.3.2. Merge operation

The merge operation takes the left hand side (lhs) pattern and finds the first zero. It then composes the Elemental(f(f0)) pattern and matches (aligns) the leading one of the elemental with the first zero of the lhs pattern. It then repeats both patterns until length(lhs pattern) * length (Elemental(f(n)) bits are produced of each. It then OR's the result producing the new pattern. Further, the merge of any pattern with the empty pattern produces that same pattern. The first zero of the empty pattern is defined to exist at position 1. (The empty pattern can be thought of as an infinite string of only zeros or 0…)

1.3.3. Elemental(f(f0))

The Elemental(f(f0)) function produces a pattern of one followed by f(f0)-1 zeros. (Recall: f0 is the location of the first zero in the lhs pattern.) An example of an elemental would be 10… = 10101010 and so on. This is an irreducible pattern. It cannot be described any more simply than 10…

1.3.4. Example Pat(2n+1)

Let's work an example to see how this works. Let's consider Pat(2n+1).
Pat(0) = emptyPattern
Pat(2*0+1) = Pat(0) merge Elemental(2*f0+1)
Pat(1) = emptyPattern merge Elemental (2*f0+1); f0 of the empty pattern is defined to be 1
Pat(1) = emptyPattern merge Elemental(3)
Pat(1) = emptyPattern merge 100… (the '…' means repeat everything to the left over and over again, not just the last entry over and over, but everything to the left, over and over)
Pat(1) = 100…
Pat(2) = 100… merge Elemental (2*f0 + 1); f0 of the lhs pattern occurs at position 2
Pat(2) = 100… merge Elemental (5); f0 of the lhs pattern occurs at position 2
Pat(2) = 100… merge 10000…
100… merge 10000… can be rewritten as follows:

```
100100100100100…
010000100001000…    OR
 -----------------------
110100100101100… = Pat(2)
```

Note length(Pat(2)) = length(Pat(1)) x length(Elemental(5)) = 3x5 = 15

1.4. PrimeCandidates(n)

The number of 0's in *Pat*(2n+1),n)
primeCandidates(n) = *primeCandidates*(n-1)*P(n-1);*primeCandidates*(1) = 2
or expanded…
primeCandidates(n) = (P(1)-1)*(P(2)-1)*…*(P(n)-1)

1.5. TwinCandidates(n)

The number of 00's in *Pat*(2n+1),n)
twinCandidates(n) = *twinCandidates* (n-1)*P(n-2); *twinCandidates* (1) = 1
twinCandidates(n) = (P(1)-2)*(P(2)-2)*…*(P(n)-2)

1.6. TripletCandidates(n)

The number of 0010's or 0100's in *Pat*(2n+1),n)
tripletCandidates(n) = *tripletCandidates* (n-1)*P(n-3); *tripletCandidates* (2) = 4
tripletCandidates (n) = 2*(P(1)-3)*(P(2)-3)*…*(P(n)-3)

1.7. QuadrupletCandidates(n)

The number of 00100's in *Pat*(2n+1),n)
quadrupletCandidates(n) = *quadrupletCandidates* (n-1)*P(n-4); *quadrupletCandidates* (2) = 1
quadrupletCandidates (n) = (P(1)-4)*(P(2)-4)*…*(P(n)-4)

1.8. #primes[P(n)->P(n)^2]

The predicted number of 0's in Pat(2n+1,n) between P(n) and P(n) squared.

$$\#primes[P(n)->P(n)^2] \sim \{\frac{primeCandidates(n-1)}{P(n-1)\#}\} * (P(n)^2 - P(n)) * \{\frac{n+200}{8n} + 0.805\}$$

or expanded…

$$\#primes[P(n)->P(n)^2] \sim \{\frac{(P(1)-1)*(P(2)-1)*...*(P(n-1)-1)}{2*P(1)*P(2)*...*P(n-1)}\} * (P(n)^2 - P(n)) * \{\frac{n+200}{8n} + 0.805\}$$

1.8. #twins[P(n)->P(n)^2]

The predicted number of 00's in Pat(2n+1,n) between P(n) and P(n) squared.

$$\#twins[P(n)->P(n)^2] \sim \{\frac{twinCandidates(n-1)}{P(n-1)\#}\} * (P(n)^2 - P(n)) * \{\frac{n+200}{4n} + 0.62\}$$

or expanded…

$$\#twins[P(n)->P(n)^2] \sim \{\frac{(P(1)-2)*(P(1)-2)*...*(P(n-1)-2)}{2*P(1)*P(2)*...*P(n-1)}\} * (P(n)^2 - P(n)) * \{\frac{n+200}{4n} + 0.62\}$$

1.9. #triplets[P(n)->P(n)^2]

The predicted number of 0010's or 0100's in Pat(2n+1,n) between P(n) and P(n) squared.

$$\#triplets[P(n)->P(n)^2] \sim \{\frac{tripletCandidates(n-1)}{P(n-1)\#}\} * (P(n)^2 - P(n)) * \{\frac{n+130}{7n} + 0.67\}$$

or expanded…

$$\#triplets[P(n)->P(n)^2] \sim \{\frac{(P(2)-3)*(P(3)-3)*...*(P(n-1)-3)}{P(1)*P(2)*...*P(n-1)}\} * (P(n)^2 - P(n)) * \{\frac{n+130}{7n} + 0.67\}$$

1.10. #quadruplets[P(n)->P(n)^2]

The predicted number of 00100's in Pat(2n+1,n) between P(n) and P(n) squared.

$$\#quadruplets[P(n)->P(n)^2] \sim \{\frac{quadrupletCandidates(n-1)}{P(n-1)\#}\} * (P(n)^2 - P(n)) * \{\frac{n+130}{2n} + 0.27\}$$

or expanded…

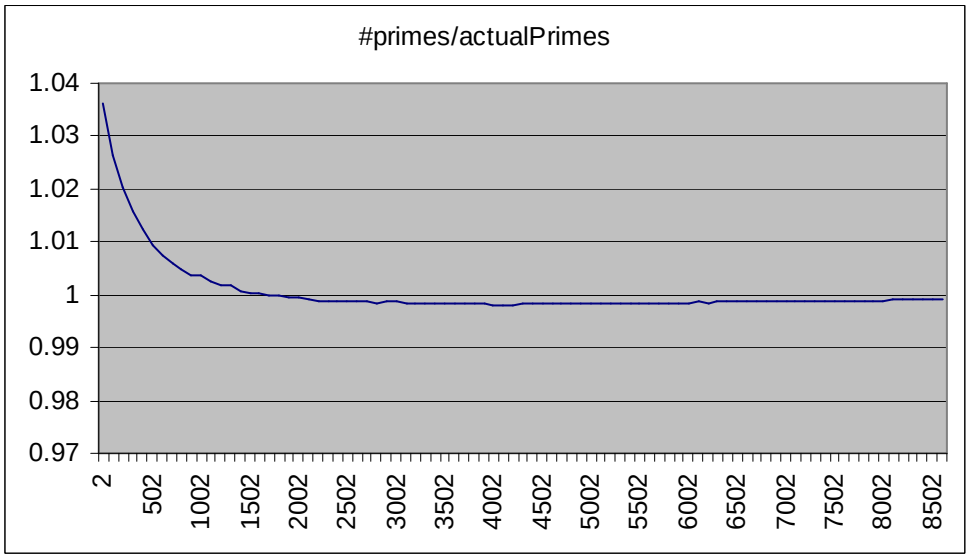
$$\#quadruplets[P(n)->P(n)^2] \sim \{\frac{(P(2)-4)*(P(3)-4)*...*(P(n-1)-4)}{2*P(1)*P(2)*...*P(n-1)}\} * (P(n)^2 - P(n)) * \{\frac{n+130}{2n} + 0.27\}$$

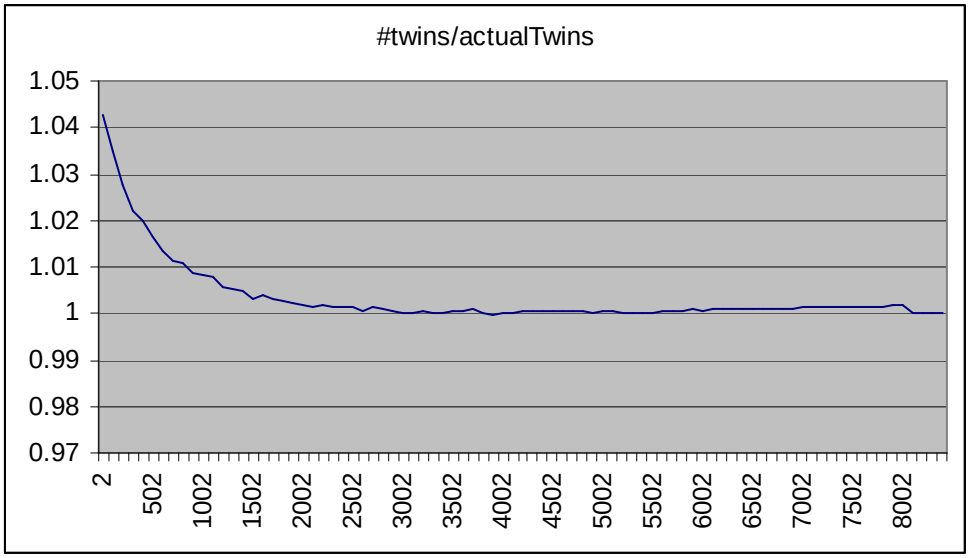
2. Materials and Methods

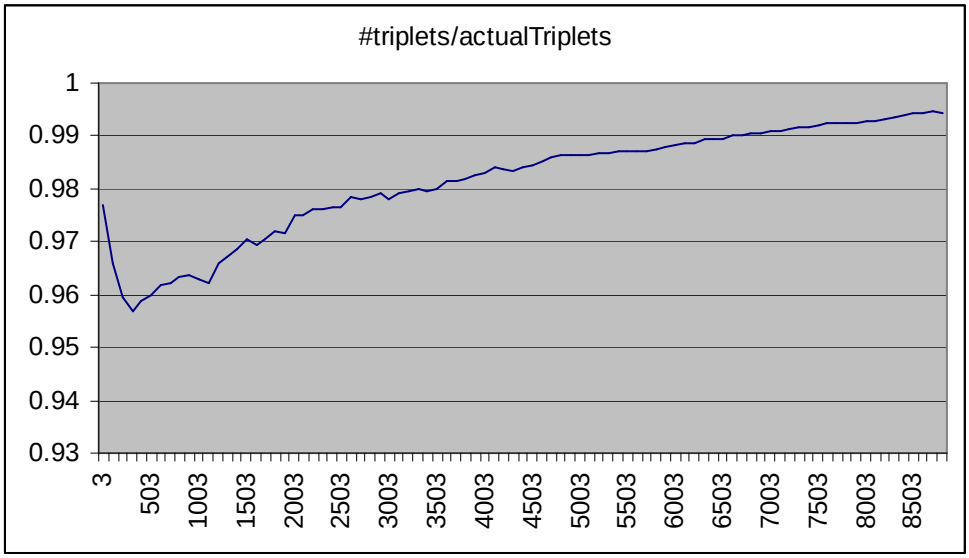
A "Java" program was constructed which tested the formulae over 400 million primes spanning 10 billion numbers. The source code for this program and the output are provided in the appendices. The data for the prime constellations was gathered from the sites mentioned in the acknowledgements.

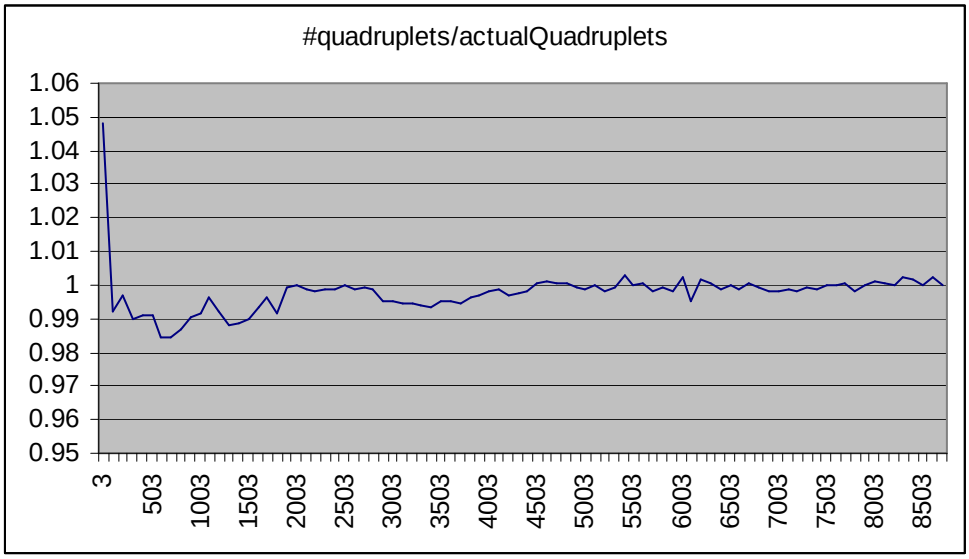
3.1. Error Rate

The formulae were tested over 9 billion numbers and 400 million primes. The largest P(n) to P(n)^2 interval tested was P(9003) to P(9003)^2. With these large numbers, the error rate was low and constant. The following are the graphs of the estimated numbers of constellations: #primes, #twins, #triplets, and #quadruplets to the actual numbers of constellations.









As we can see, the error rate becomes constant (convergent) and low with large n. For example we achieve 4 9's of accuracy with the #quadruplets.

4. Discussion

Let us examine this formula:

$$\#quadruplets[P(n) -> P(n)^2] \sim \{\frac{(P(2)-4)*(P(3)-4)*...*(P(n-1)-4)}{2*P(1)*P(2)*...*P(n-1)}\}*(P(n)^2-P(n))*\{\frac{n+130}{2n}+0.27\}$$

We note that it is of the general form A(n) * B(n) * C(n). This is true of all the constellation formulae #primes, #twins, #triplets and #quadruplets. Taking the terms one by one: A(n) is the proportion of the given constellation in the total pattern. It is the probability of the given constellation occurring at any given point in the pattern. So for the #quadruplets formula above, A(n) is the proportion of quadruplet candidates to the total size of the pattern.

B(n) is the difference between P(n) and P(n)^2. This term is significant because any 0 in the pattern between P(n) and P(n)^2 is going to be a prime. This is because it cannot be a product of the primes beneath it, and the primes above it all have effect beyond P(n)^2. Thus any constellation found between P(n) and P(n)^2 will be prime and hence and actual constellation, not just a candidate.

The C(n) term accounts for the skewing of the constellation in Pat(2n+1,n). Skewing occurs in a manner similar to the skewing of the primes in general. It is well known that the primes are initially more dense than later. In this case, the Pat(2n+1,n) function skews constellation candidates towards the end of the pattern. In so doing it makes all the constellations initially more dense than later.

5. Conclusions

Revisiting the #twins formula:

$$\#twins[P(n) -> P(n)^2] \sim \{\frac{(P(1)-2)*(P(1)-2)*...*(P(n-1)-2)}{2*P(1)*P(2)*...*P(n-1)}\}*(P(n)^2-P(n))*\{\frac{n+200}{4n}+0.62\}$$

Again we note that the formula is of the general form A(n)*B(n)*C(n). We note that A(n) converges. This is true because P(n)-2 / P(n) approaches 1 for large n. Examining C(n), we note that C(n) is simply ¼ + 0.62 = 0.87 for large n. So in general we have A(n), a number between 0 and 1 multiplied by C(n) which too is a number between 0 and 1, multiplied by B(n) which is an exponential function. Thus with large enough n, we will always get constellations numbering above one, moreover, increasing with larger n.
A word about the skewing function C(n): As Pat(2n+1,n) grows, it recursively skews constellation candidates towards end of the pattern . Having said all that, the interval we're looking at P(n) to P(n)^2 becomes an ever smaller and smaller pieces of the total pattern whose length is given by the primorial P(n)#. Thus we are taking an ever smaller proportion of recursively skewing pattern. This leads to a constant skew between P(n) and P(n)^2.

Appendix I – Java Code

```
public class Twins {

 private static final int ITERATIONS = 9010;

 private static final int STEP_SIZE = 100;

 public static boolean isPrime(long test) {
  if (test > 3 && test % 3 == 0)
   return false;
  if (test > 5 && test % 5 == 0)
   return false;
  if (test > 7 && test % 7 == 0)
   return false;
  double sqrt = Math.sqrt(test);
  long sqrtInt = Math.round(sqrt);
  for (long i = 3; i <= sqrtInt; i += 2) {
   if (test % i == 0)
    return false;
  }
  return true;
 }

 private static final int pnCacheSize = 1000001;

 private static int[] pnCache = new int[pnCacheSize];
```

```
 // return curr prime note I consider P(1) = 3
 public static long P(long n) {
  if (n < 1)
   return 0; // error
  if (n == 1)
   return 3;
  // try cache
  int fetch = 0;
  if (n < pnCacheSize)
   fetch = pnCache[(int) n];
  if (fetch > 0)
   return Long.valueOf(fetch);
  long currPrime = 0;
  long startSearch = 3;
  // do we know what P(n-1) is?
  if (((int) n - 1) < pnCacheSize)
   fetch = pnCache[(int) n - 1];
  if (fetch > 0) {
   startSearch = Long.valueOf(fetch) + 2;
   currPrime = n - 1;
  }
  for (long i = startSearch;; i += 2) {
   if (isPrime(i)) {
    currPrime = currPrime + 1;
   }
   if (currPrime == n) {
    if (n < pnCacheSize)
     pnCache[(int) n] = (int) i;
    return i;
   }
  }
 }

 // returns the number of 0's in Pat(f(n),n)
 public static BigInteger primeCandidates(long n) {
  BigInteger returnVal = BigInteger.ONE;
  for (long i = 1; i <= n; i++)
   returnVal = returnVal.multiply(new BigInteger(String.valueOf(P(i) - 1)));
  return returnVal;
 }

 // returns the number of 00's in Pat(f(n),n)
 public static BigInteger twinCandidates(long n) {
  BigInteger returnVal = BigInteger.ONE;
  for (long i = 1; i <= n; i++)
   returnVal = returnVal.multiply(new BigInteger(String.valueOf(P(i) - 2)));
  return returnVal;
 }

 // returns the number of 0010's and 0100's in Pat(f(n),n)
 public static BigInteger tripletCandidates(long n) {
  BigInteger returnVal = BigInteger.ONE;
  for (long i = 2; i <= n; i++)
   returnVal = returnVal.multiply(new BigInteger(String.valueOf(P(i) - 3)));
  return returnVal.multiply(new BigInteger("2"));
 }

 // returns the number of 00100's in Pat(f(n),n)
 public static BigInteger quadrupletCandidates(long n) {
  BigInteger returnVal = BigInteger.ONE;
  for (long i = 2; i <= n; i++)
   returnVal = returnVal.multiply(new BigInteger(String.valueOf(P(i) - 4)));
  return returnVal;
 }

 public static BigInteger numberPrimesBetweenPnAndPnSquared(long n, boolean addCorrection) {
  if (n < 2)
   return BigInteger.ZERO; // error
  long Pn = P(n);
  long PnSquared = Pn * Pn;
  long primorialIndex = n - 1;
  BigInteger numerator = primeCandidates(n - 1).multiply(new BigInteger(String.valueOf(PnSquared -
Pn)));
  BigInteger denominator = BigInteger.ONE;
  // divide through by the primorial(n-1)
  while (primorialIndex > 0) {
   denominator = denominator.multiply(new BigInteger(String.valueOf(P(primorialIndex))));
```

```
    primorialIndex--;
   }
   // my P(n) function omits 2 so we'll add it back into the primorial here
   denominator = denominator.multiply(new BigInteger("2"));
   BigInteger result = numerator.divide(denominator);
   return result;
  }

  public static BigInteger numberTwinsBetweenPnAndPnSquared(long n, boolean addCorrection) {
   if (n < 2)
    return BigInteger.ZERO; // error
   long Pn = P(n);
   long PnSquared = Pn * Pn;
   long primorialIndex = n - 1;
   BigInteger numerator = twinCandidates(n - 1).multiply(new BigInteger(String.valueOf(PnSquared -
Pn)));
   BigInteger denominator = BigInteger.ONE;
   // divide through by the primorial(n-1)
   while (primorialIndex > 0) {
    denominator = denominator.multiply(new BigInteger(String.valueOf(P(primorialIndex))));
    primorialIndex--;
   }
   // my P(n) function omits 2 so we'll add it back into the primorial here
   denominator = denominator.multiply(new BigInteger("2"));
   BigInteger result = numerator.divide(denominator);
   return result;
  }

  public static BigInteger numberTripletsBetweenPnAndPnSquared(long n, boolean addCorrection) {
   if (n < 3)
    return BigInteger.ZERO; // error
   long Pn = P(n);
   long PnSquared = Pn * Pn;
   long primorialIndex = n - 1;
   BigInteger numerator = tripletCandidates(n - 1).multiply(new BigInteger(String.valueOf(PnSquared -
Pn)));
   BigInteger denominator = BigInteger.ONE;
   // divide through by the primorial(n-1)
   while (primorialIndex > 0) {
    denominator = denominator.multiply(new BigInteger(String.valueOf(P(primorialIndex))));
    primorialIndex--;
   }
   // my P(n) function omits 2 so we'll add it back into the primorial here
   denominator = denominator.multiply(new BigInteger("2"));
   BigInteger result = numerator.divide(denominator);
   return result;
  }

  public static BigInteger numberQuadrupletsBetweenPnAndPnSquared(long n, boolean addCorrection) {
   if (n < 3)
    return BigInteger.ZERO; // error
   long Pn = P(n);
   long PnSquared = Pn * Pn;
   long primorialIndex = n - 1;
   BigInteger numerator = quadrupletCandidates(n - 1).multiply(new BigInteger(String.valueOf(PnSquared -
Pn)));
   BigInteger denominator = BigInteger.ONE;
   // divide through by the primorial(n-1)
   while (primorialIndex > 0) {
    denominator = denominator.multiply(new BigInteger(String.valueOf(P(primorialIndex))));
    primorialIndex--;
   }
   // my P(n) function omits 2 so we'll add it back into the primorial here
   denominator = denominator.multiply(new BigInteger("2"));
   BigInteger result = numerator.divide(denominator);
   return result;
  }

  // calculated using data from http://www.prime-numbers.org/
  private static long[] actualPrimeCache = { 6, 27253, 116089, 282595, 517731, 843263, 1253429, 1747824,
2317171, 2958710, 3728088, 4575190, 5490847, 6528992, 7731221, 8884687,
    10199129, 11678076, 13074990, 14691513, 16422020, 18131331, 20203528, 22126400, 24252024, 26367435,
28579537, 30940455, 33609601, 36160431, 38954643, 41843347, 44514071,
    47860093, 50905802, 53971610, 57122848, 60556833, 64353282, 67782415, 71540286, 75542412, 79406070,
83771330, 87566302, 91530345, 96138842, 100771575, 105654258, 110426640,
    115263208, 119968411, 125055792, 130031019, 135469298, 140657126, 146229569, 151742063, 156984829,
162716558, 168493957, 174706969, 180938348, 187522445, 193375687,
```

```
   200699230, 206840838, 213649661, 220761421, 227584666, 234797811, 241643774, 248818004, 256356209,
263748195, 271226154, 278969578, 286803001, 294683086, 302607332,
   310503684, 318451118, 327327046, 335656434, 344269421, 353323485, 362849792, 371349792, 380163683,
389623217, 398052912, 407622981 };

 public static long numPrimePnToPnSquared(long n) {
  if (n < 2)
   return 0; // error
  int cacheIndex = ((int) n - 2) / 100;
  if (cacheIndex < actualPrimeCache.length)
   return actualPrimeCache[cacheIndex];

  long Pn = P(n);
  long PnSquared = Pn * Pn;
  long numFound = 0;
  for (long i = n + 1; P(i) < (PnSquared); i++) {
   numFound++;
  }
  return numFound;
 }

 // calculated using data from http://www.prime-numbers.org/
 private static long[] actualTwinCache = { 2, 3115, 11769, 26777, 46682, 73381, 106042, 144399, 187845,
235854, 292587, 354568, 420699, 495050, 580258, 661085, 752109, 854421,
   950156, 1060206, 1177756, 1293319, 1431887, 1559972, 1701451, 1840693, 1986216, 2141055, 2314925,
2480618, 2661589, 2847342, 3018956, 3233644, 3427940, 3622835, 3822540,
   4039952, 4279135, 4494454, 4730080, 4979960, 5220799, 5492026, 5727822, 5974303, 6259339, 6544433,
6844632, 7137442, 7433138, 7720616, 8031074, 8334010, 8664525, 8979944,
   9317479, 9650489, 9967068, 10312208, 10659241, 11031932, 11404637, 11798464, 12147708, 12585159,
12950849, 13355057, 13776658, 14181161, 14608496, 15013995, 15437256,
   15881330, 16316622, 16755791, 17209819, 17669160, 18130749, 18593756, 19054427, 19517624, 20035338,
20520080, 21019814, 21544819, 22097318, 22628832, 23139352, 23686473,
   24172627, 24724699 };

 public static long numTwinsPnToPnSquared(long n) {
  if (n < 2)
   return 0; // error
  int cacheIndex = ((int) n - 2) / 100;
  if (cacheIndex < actualTwinCache.length)
   return actualTwinCache[cacheIndex];

  long Pn = P(n);
  long PnSquared = Pn * Pn;
  long numFound = 0;
  for (long i = n + 1; P(i) < (PnSquared); i++) {
   if (P(i) + 2 == P(i + 1))
    numFound++;
  }
  return numFound;
 }

 // calculated using data from http://www.prime-numbers.org/
 static long[] actualTripletsCache = { 5, 1201, 3985, 8295, 13899, 21166, 29575, 39366, 50211, 61945,
75902, 90784, 106710, 124040, 143870, 162190, 183225, 206143, 227685,
   252365, 278225, 304120, 334086, 361904, 392499, 422504, 454415, 487801, 524631, 559743, 598319,
637667, 674707, 719579, 760081, 800901, 842203, 887260, 936273, 981103,
   1029058, 1080092, 1130130, 1184813, 1233725, 1282795, 1341196, 1397780, 1458120, 1516772, 1575866,
1634300, 1696241, 1756829, 1822675, 1886799, 1953306, 2019698, 2080588,
   2148747, 2217358, 2291091, 2363947, 2441172, 2509743, 2594188, 2667299, 2744942, 2826723, 2906316,
2989341, 3067191, 3148506, 3233854, 3318172, 3401739, 3488993, 3576582,
   3667010, 3754791, 3842369, 3932268, 4031071, 4125125, 4218320, 4317077, 4421864, 4513455, 4610164,
4714555, 4806432, 4909990 };

 public static long numTripletsPnToPnSquared(long n) {
  if (n < 3)
   return 0; // error
  int cacheIndex = ((int) n - 3) / 100;
  if (cacheIndex < actualTripletsCache.length)
   return actualTripletsCache[cacheIndex];

  long Pn = P(n);
  long PnSquared = Pn * Pn;
  long numFound = 0;
  for (long i = n + 1; P(i) < (PnSquared); i++) {
   if (P(i) + 2 == P(i + 1) && P(i) + 6 == P(i + 2))
    numFound++;
   else if (P(i) + 4 == P(i + 1) && P(i) + 6 == P(i + 2))
```

```
    numFound++;
  }
  return numFound;
 }

 // calculated using data from http://www.prime-numbers.org/
 static long[] actualQuadCache = { 1, 68, 236, 460, 747, 1068, 1444, 1860, 2314, 2811, 3380, 3967,
4574, 5238, 5997, 6722, 7562, 8441, 9221, 10118, 11053, 12054, 13095, 14090,
   15232, 16316, 17440, 18640, 19952, 21215, 22580, 23987, 25344, 26949, 28396, 29809, 31251, 32841,
34530, 36089, 37778, 39501, 41191, 43046, 44676, 46369, 48392, 50279,
   52248, 54218, 56255, 58216, 60369, 62411, 64572, 66828, 68954, 70932, 73128, 75370, 77791, 80178,
82701, 84967, 87821, 90107, 92616, 95303, 97949, 100672, 103225, 105919,
   108713, 111525, 114222, 117008, 119761, 122691, 125502, 128284, 131109, 134264, 137265, 140209,
143284, 146536, 149686, 152741, 156148, 159151, 162376 };

 public static long numQuadrupletsPnToPnSquared(long n) {
  if (n < 3)
   return 0; // error
  int cacheIndex = ((int) n - 3) / 100;
  if (cacheIndex < actualQuadCache.length)
   return actualQuadCache[cacheIndex];
  long Pn = P(n);
  long PnSquared = Pn * Pn;
  long numFound = 0;
  for (long i = n + 1; P(i) < (PnSquared); i++) {
   if (P(i) + 2 == P(i + 1) && P(i) + 6 == P(i + 2) && P(i) + 8 == P(i + 3))
    numFound++;
  }
  return numFound;
 }

 public static void main(String[] args) throws IOException {

  // use a small prime cache to speed things up
  // file is available at:
  // http://primes.utm.edu/lists/small/millions/primes1.zip
  String line;
  int pnIndex = 0;
  BufferedReader br;
  System.out.print("Loading [primes1.txt]... ");
  br = new BufferedReader(new FileReader("primes1.txt"));
  while ((line = br.readLine()) != null) {
   if (line.indexOf("primes.utm.edu") != -1)
    continue;
   if (line.trim().equals(""))
    continue;
   String[] primes = line.trim().split("\\s+");
   for (int x = 0; x < primes.length; x++)
    pnCache[pnIndex++] = Integer.valueOf(primes[x]);
  }
  br.close();
  System.out.println("done.");

  System.out.println("-------------------------------------------------------");
  System.out.println("EXAMINING THE #Primes[P(n)->P(n)^2] AND #Primes_Corrected[P(n)->P(n)^2]
FORMULAE");
  for (int x = 2; x < ITERATIONS; x += STEP_SIZE) {
   BigInteger numPrimes = numberPrimesBetweenPnAndPnSquared(x, false);
   BigInteger numPrimesCorrected = new BigInteger(String.valueOf(Math.round(numPrimes.longValue() *
(((x + 200) / (8.0 * x)) + 0.805))));
   long actualPrimes = numPrimePnToPnSquared(x);
   System.out.println("#Primes[P(" + x + ")->P(" + x + ")^2] = " + numPrimes + "; #Primes_Corrected[P("
+ x + ")->P(" + x + ")^2] = " + numPrimesCorrected
     + "; actual number primes in this interval = " + actualPrimes + "; (numPrimesCorrected-
actualPrimes) = " + (numPrimesCorrected.longValue() - actualPrimes)
     + "; (#Primes_Corrected/actualPrimes) = " + (numPrimesCorrected.doubleValue() / ((double)
actualPrimes)));
  }
  System.out.println("-------------------------------------------------------");
  System.out.println("EXAMINING THE #Twins[P(n)->P(n)^2] AND #Twins_Corrected[P(n)->P(n)^2] FORMULAE");
  for (int x = 2; x < ITERATIONS; x += STEP_SIZE) {
   BigInteger numTwins = numberTwinsBetweenPnAndPnSquared(x, false);
   BigInteger numTwinsCorrected = new BigInteger(String.valueOf(Math.round(numTwins.longValue() * (((x
+ 200) / (4.0 * x)) + 0.62))));
   long actualTwins = numTwinsPnToPnSquared(x);
   System.out.println("#Twins[P(" + x + ")->P(" + x + ")^2] = " + numTwins + "; #Twins_Corrected[P(" +
x + ")->P(" + x + ")^2] = " + numTwinsCorrected
```

```
     + "; actual number twins in this interval = " + actualTwins + "; (numTwinsCorrected-actualTwins) =
" + (numTwinsCorrected.longValue() - actualTwins)
     + "; (#Twins_Corrected/actualTwins) = " + (numTwinsCorrected.doubleValue() / (actualTwins)));
  }
  System.out.println("-------------------------------------------------------");
  System.out.println("EXAMINING THE #Triplets[P(n)->P(n)^2] AND #Triplets_Corrected[P(n)->P(n)^2]
FORMULAE");
  for (int x = 3; x < ITERATIONS; x += STEP_SIZE) {
   BigInteger numTriplets = numberTripletsBetweenPnAndPnSquared(x, false);
   BigInteger numTripletsCorrected = new BigInteger(String.valueOf(Math.round(numTriplets.longValue() *
(((x + 130) / (7.0 * x)) + 0.67))));
   long actualTriplets = numTripletsPnToPnSquared(x);
   System.out.println("#Triplets[P(" + x + ")->P(" + x + ")^2] = " + numTriplets + ";
#Triplets_Corrected[P(" + x + ")->P(" + x + ")^2] = " + numTripletsCorrected
     + "; actual number triplets in this interval = " + actualTriplets + "; (numTripletsCorrected-
actualTriplets) = " + (numTripletsCorrected.longValue() - actualTriplets)
     + "; (#Triplets_Corrected/actualTriplets) = " + (numTripletsCorrected.doubleValue() /
(actualTriplets)));
  }
  System.out.println("-------------------------------------------------------");
  System.out.println("EXAMINING THE #Quadruplets[P(n)->P(n)^2] AND #Quadruplets_Corrected[P(n)->P(n)^2]
FORMULAE");
  for (int x = 3; x < ITERATIONS; x += STEP_SIZE) {
   BigInteger numQuadruplets = numberQuadrupletsBetweenPnAndPnSquared(x, false);
   BigInteger numQuadrupletsCorrected = new
BigInteger(String.valueOf(Math.round(numQuadruplets.longValue() * (((x + 130) / (2.0 * x)) + 0.27))));
   long actualQuadruplets = numQuadrupletsPnToPnSquared(x);
   System.out.println("#Quadruplets[P(" + x + ")->P(" + x + ")^2] = " + numQuadruplets + ";
#Quadruplets_Corrected[P(" + x + ")->P(" + x + ")^2] = " + numQuadrupletsCorrected
     + "; actual number Quadruplets in this interval = " + actualQuadruplets + ";
(numQuadrupletsCorrected-actualQuadruplets) = "
     + (numQuadrupletsCorrected.longValue() - actualQuadruplets) + ";
(#Quadruplets_Corrected/actualQuadruplets) = "
     + (numQuadrupletsCorrected.doubleValue() / (actualQuadruplets)));
  }
 }
}
```

Appendix II – Program Output

```
java scratchpad.Twins
Loading [primes1.txt]... done.
-------------------------------------------------------
EXAMINING THE #Primes[P(n)->P(n)^2] AND #Primes_Corrected[P(n)->P(n)^2] FORMULAE
#Primes[P(2)->P(2)^2] = 6; #Primes_Corrected[P(2)->P(2)^2] = 81; actual number primes in this interval
= 6; (numPrimesCorrected-actualPrimes) = 75; (#Primes_Corrected/actualPrimes) = 13.5
#Primes[P(102)->P(102)^2] = 27979; #Primes_Corrected[P(102)->P(102)^2] = 32878; actual number primes in
this interval = 27253; (numPrimesCorrected-actualPrimes) = 5625; (#Primes_Corrected/actualPrimes) =
1.2063992954904048
#Primes[P(202)->P(202)^2] = 120057; #Primes_Corrected[P(202)->P(202)^2] = 126512; actual number primes
in this interval = 116089; (numPrimesCorrected-actualPrimes) = 10423; (#Primes_Corrected/actualPrimes)
= 1.0897845618447914
#Primes[P(302)->P(302)^2] = 294391; #Primes_Corrected[P(302)->P(302)^2] = 298154; actual number primes
in this interval = 282595; (numPrimesCorrected-actualPrimes) = 15559; (#Primes_Corrected/actualPrimes)
= 1.055057591252499
#Primes[P(402)->P(402)^2] = 540729; #Primes_Corrected[P(402)->P(402)^2] = 536505; actual number primes
in this interval = 517731; (numPrimesCorrected-actualPrimes) = 18774; (#Primes_Corrected/actualPrimes)
= 1.0362620743204483
#Primes[P(502)->P(502)^2] = 883473; #Primes_Corrected[P(502)->P(502)^2] = 865628; actual number primes
in this interval = 843263; (numPrimesCorrected-actualPrimes) = 22365; (#Primes_Corrected/actualPrimes)
= 1.0265219747575787
#Primes[P(602)->P(602)^2] = 1316338; #Primes_Corrected[P(602)->P(602)^2] = 1278860; actual number
primes in this interval = 1253429; (numPrimesCorrected-actualPrimes) = 25431;
(#Primes_Corrected/actualPrimes) = 1.0202891428234069
#Primes[P(702)->P(702)^2] = 1838668; #Primes_Corrected[P(702)->P(702)^2] = 1775441; actual number
primes in this interval = 1747824; (numPrimesCorrected-actualPrimes) = 27617;
(#Primes_Corrected/actualPrimes) = 1.0158007900108936
#Primes[P(802)->P(802)^2] = 2440360; #Primes_Corrected[P(802)->P(802)^2] = 2345606; actual number
primes in this interval = 2317171; (numPrimesCorrected-actualPrimes) = 28435;
(#Primes_Corrected/actualPrimes) = 1.0122714292557606
#Primes[P(902)->P(902)^2] = 3117672; #Primes_Corrected[P(902)->P(902)^2] = 2985845; actual number
primes in this interval = 2958710; (numPrimesCorrected-actualPrimes) = 27135;
(#Primes_Corrected/actualPrimes) = 1.009171226649452
#Primes[P(1002)->P(1002)^2] = 3933655; #Primes_Corrected[P(1002)->P(1002)^2] = 3756444; actual number
primes in this interval = 3728088; (numPrimesCorrected-actualPrimes) = 28356;
(#Primes_Corrected/actualPrimes) = 1.0076060436341632
```

```
#Primes[P(1102)->P(1102)^2] = 4831805; #Primes_Corrected[P(1102)->P(1102)^2] = 4603193; actual number
primes in this interval = 4575190; (numPrimesCorrected-actualPrimes) = 28003;
(#Primes_Corrected/actualPrimes) = 1.0061206201272515
#Primes[P(1202)->P(1202)^2] = 5801938; #Primes_Corrected[P(1202)->P(1202)^2] = 5516475; actual number
primes in this interval = 5490847; (numPrimesCorrected-actualPrimes) = 25628;
(#Primes_Corrected/actualPrimes) = 1.0046674037721322
#Primes[P(1302)->P(1302)^2] = 6904149; #Primes_Corrected[P(1302)->P(1302)^2] = 6553427; actual number
primes in this interval = 6528992; (numPrimesCorrected-actualPrimes) = 24435;
(#Primes_Corrected/actualPrimes) = 1.0037425378986526
#Primes[P(1402)->P(1402)^2] = 8185898; #Primes_Corrected[P(1402)->P(1402)^2] = 7758853; actual number
primes in this interval = 7731221; (numPrimesCorrected-actualPrimes) = 27632;
(#Primes_Corrected/actualPrimes) = 1.0035740796958204
#Primes[P(1502)->P(1502)^2] = 9408124; #Primes_Corrected[P(1502)->P(1502)^2] = 8906149; actual number
primes in this interval = 8884687; (numPrimesCorrected-actualPrimes) = 21462;
(#Primes_Corrected/actualPrimes) = 1.0024156168923002
#Primes[P(1602)->P(1602)^2] = 10805652; #Primes_Corrected[P(1602)->P(1602)^2] = 10217884; actual number
primes in this interval = 10199129; (numPrimesCorrected-actualPrimes) = 18755;
(#Primes_Corrected/actualPrimes) = 1.0018388825163405
#Primes[P(1702)->P(1702)^2] = 12382774; #Primes_Corrected[P(1702)->P(1702)^2] = 11697865; actual number
primes in this interval = 11678076; (numPrimesCorrected-actualPrimes) = 19789;
(#Primes_Corrected/actualPrimes) = 1.0016945428339394
#Primes[P(1802)->P(1802)^2] = 13862781; #Primes_Corrected[P(1802)->P(1802)^2] = 13084711; actual number
primes in this interval = 13074990; (numPrimesCorrected-actualPrimes) = 9721;
(#Primes_Corrected/actualPrimes) = 1.0007434804921458
#Primes[P(1902)->P(1902)^2] = 15584098; #Primes_Corrected[P(1902)->P(1902)^2] = 14698049; actual number
primes in this interval = 14691513; (numPrimesCorrected-actualPrimes) = 6536;
(#Primes_Corrected/actualPrimes) = 1.0004448827020063
#Primes[P(2002)->P(2002)^2] = 17428621; #Primes_Corrected[P(2002)->P(2002)^2] = 16426258; actual number
primes in this interval = 16422020; (numPrimesCorrected-actualPrimes) = 4238;
(#Primes_Corrected/actualPrimes) = 1.0002580681304736
#Primes[P(2102)->P(2102)^2] = 19244348; #Primes_Corrected[P(2102)->P(2102)^2] = 18126125; actual number
primes in this interval = 18131331; (numPrimesCorrected-actualPrimes) = -5206;
(#Primes_Corrected/actualPrimes) = 0.9997128727063667
#Primes[P(2202)->P(2202)^2] = 21462074; #Primes_Corrected[P(2202)->P(2202)^2] = 20203395; actual number
primes in this interval = 20203528; (numPrimesCorrected-actualPrimes) = -133;
(#Primes_Corrected/actualPrimes) = 0.9999934169913295
#Primes[P(2302)->P(2302)^2] = 23507283; #Primes_Corrected[P(2302)->P(2302)^2] = 22117065; actual number
primes in this interval = 22126400; (numPrimesCorrected-actualPrimes) = -9335;
(#Primes_Corrected/actualPrimes) = 0.9995781057921759
#Primes[P(2402)->P(2402)^2] = 25775158; #Primes_Corrected[P(2402)->P(2402)^2] = 24239165; actual number
primes in this interval = 24252024; (numPrimesCorrected-actualPrimes) = -12859;
(#Primes_Corrected/actualPrimes) = 0.9994697762133173
#Primes[P(2502)->P(2502)^2] = 28026142; #Primes_Corrected[P(2502)->P(2502)^2] = 26344349; actual number
primes in this interval = 26367435; (numPrimesCorrected-actualPrimes) = -23086;
(#Primes_Corrected/actualPrimes) = 0.9991244502925674
#Primes[P(2602)->P(2602)^2] = 30381742; #Primes_Corrected[P(2602)->P(2602)^2] = 28546928; actual number
primes in this interval = 28579537; (numPrimesCorrected-actualPrimes) = -32609;
(#Primes_Corrected/actualPrimes) = 0.9988590088075955
#Primes[P(2702)->P(2702)^2] = 32897368; #Primes_Corrected[P(2702)->P(2702)^2] = 30898932; actual number
primes in this interval = 30940455; (numPrimesCorrected-actualPrimes) = -41523;
(#Primes_Corrected/actualPrimes) = 0.9986579706083831
#Primes[P(2802)->P(2802)^2] = 35754954; #Primes_Corrected[P(2802)->P(2802)^2] = 33571120; actual number
primes in this interval = 33609601; (numPrimesCorrected-actualPrimes) = -38481;
(#Primes_Corrected/actualPrimes) = 0.9988550593028462
#Primes[P(2902)->P(2902)^2] = 38474427; #Primes_Corrected[P(2902)->P(2902)^2] = 36112665; actual number
primes in this interval = 36160431; (numPrimesCorrected-actualPrimes) = -47766;
(#Primes_Corrected/actualPrimes) = 0.9986790533553098
#Primes[P(3002)->P(3002)^2] = 41463008; #Primes_Corrected[P(3002)->P(3002)^2] = 38905892; actual number
primes in this interval = 38954643; (numPrimesCorrected-actualPrimes) = -48751;
(#Primes_Corrected/actualPrimes) = 0.9987485188864393
#Primes[P(3102)->P(3102)^2] = 44551385; #Primes_Corrected[P(3102)->P(3102)^2] = 41791842; actual number
primes in this interval = 41843347; (numPrimesCorrected-actualPrimes) = -51505;
(#Primes_Corrected/actualPrimes) = 0.9987690994221853
#Primes[P(3202)->P(3202)^2] = 47390317; #Primes_Corrected[P(3202)->P(3202)^2] = 44443000; actual number
primes in this interval = 44514071; (numPrimesCorrected-actualPrimes) = -71071;
(#Primes_Corrected/actualPrimes) = 0.9984034037237349
#Primes[P(3302)->P(3302)^2] = 50982824; #Primes_Corrected[P(3302)->P(3302)^2] = 47800026; actual number
primes in this interval = 47860093; (numPrimesCorrected-actualPrimes) = -60067;
(#Primes_Corrected/actualPrimes) = 0.9987449460242378
#Primes[P(3402)->P(3402)^2] = 54232697; #Primes_Corrected[P(3402)->P(3402)^2] = 50834944; actual number
primes in this interval = 50905802; (numPrimesCorrected-actualPrimes) = -70858;
(#Primes_Corrected/actualPrimes) = 0.9986080565040504
#Primes[P(3502)->P(3502)^2] = 57500268; #Primes_Corrected[P(3502)->P(3502)^2] = 53885731; actual number
primes in this interval = 53971610; (numPrimesCorrected-actualPrimes) = -85879;
(#Primes_Corrected/actualPrimes) = 0.9984088115955777
```

```
#Primes[P(3602)->P(3602)^2] = 60858195; #Primes_Corrected[P(3602)->P(3602)^2] = 57020513; actual number
primes in this interval = 57122848; (numPrimesCorrected-actualPrimes) = -102335;
(#Primes_Corrected/actualPrimes) = 0.9982085101919288
#Primes[P(3702)->P(3702)^2] = 64529409; #Primes_Corrected[P(3702)->P(3702)^2] = 60448124; actual number
primes in this interval = 60556833; (numPrimesCorrected-actualPrimes) = -108709;
(#Primes_Corrected/actualPrimes) = 0.9982048433741573
#Primes[P(3802)->P(3802)^2] = 68601233; #Primes_Corrected[P(3802)->P(3802)^2] = 64250233; actual number
primes in this interval = 64353282; (numPrimesCorrected-actualPrimes) = -103049;
(#Primes_Corrected/actualPrimes) = 0.9983986986087205
#Primes[P(3902)->P(3902)^2] = 72256336; #Primes_Corrected[P(3902)->P(3902)^2] = 67661337; actual number
primes in this interval = 67782415; (numPrimesCorrected-actualPrimes) = -121078;
(#Primes_Corrected/actualPrimes) = 0.9982137254920763
#Primes[P(4002)->P(4002)^2] = 76275025; #Primes_Corrected[P(4002)->P(4002)^2] = 71412254; actual number
primes in this interval = 71540286; (numPrimesCorrected-actualPrimes) = -128032;
(#Primes_Corrected/actualPrimes) = 0.9982103510181661
#Primes[P(4102)->P(4102)^2] = 80562560; #Primes_Corrected[P(4102)->P(4102)^2] = 75414176; actual number
primes in this interval = 75542412; (numPrimesCorrected-actualPrimes) = -128236;
(#Primes_Corrected/actualPrimes) = 0.9983024635220809
#Primes[P(4202)->P(4202)^2] = 84690036; #Primes_Corrected[P(4202)->P(4202)^2] = 79265601; actual number
primes in this interval = 79406070; (numPrimesCorrected-actualPrimes) = -140469;
(#Primes_Corrected/actualPrimes) = 0.9982310042544607
#Primes[P(4302)->P(4302)^2] = 89375666; #Primes_Corrected[P(4302)->P(4302)^2] = 83638754; actual number
primes in this interval = 83771330; (numPrimesCorrected-actualPrimes) = -132576;
(#Primes_Corrected/actualPrimes) = 0.9984174060504949
#Primes[P(4402)->P(4402)^2] = 93416166; #Primes_Corrected[P(4402)->P(4402)^2] = 87407567; actual number
primes in this interval = 87566302; (numPrimesCorrected-actualPrimes) = -158735;
(#Primes_Corrected/actualPrimes) = 0.9981872592952481
#Primes[P(4502)->P(4502)^2] = 97640740; #Primes_Corrected[P(4502)->P(4502)^2] = 91348096; actual number
primes in this interval = 91530345; (numPrimesCorrected-actualPrimes) = -182249;
(#Primes_Corrected/actualPrimes) = 0.998008867987988
#Primes[P(4602)->P(4602)^2] = 102584312; #Primes_Corrected[P(4602)->P(4602)^2] = 95960691; actual
number primes in this interval = 96138842; (numPrimesCorrected-actualPrimes) = -178151;
(#Primes_Corrected/actualPrimes) = 0.9981469404426568
#Primes[P(4702)->P(4702)^2] = 107548980; #Primes_Corrected[P(4702)->P(4702)^2] = 100592377; actual
number primes in this interval = 100771575; (numPrimesCorrected-actualPrimes) = -179198;
(#Primes_Corrected/actualPrimes) = 0.9982217406049275
#Primes[P(4802)->P(4802)^2] = 112790355; #Primes_Corrected[P(4802)->P(4802)^2] = 105482235; actual
number primes in this interval = 105654258; (numPrimesCorrected-actualPrimes) = -172023;
(#Primes_Corrected/actualPrimes) = 0.9983718308825755
#Primes[P(4902)->P(4902)^2] = 117902415; #Primes_Corrected[P(4902)->P(4902)^2] = 110250543; actual
number primes in this interval = 110426640; (numPrimesCorrected-actualPrimes) = -176097;
(#Primes_Corrected/actualPrimes) = 0.9984053032855116
#Primes[P(5002)->P(5002)^2] = 123081676; #Primes_Corrected[P(5002)->P(5002)^2] = 115081121; actual
number primes in this interval = 115263208; (numPrimesCorrected-actualPrimes) = -182087;
(#Primes_Corrected/actualPrimes) = 0.9984202504584117
#Primes[P(5102)->P(5102)^2] = 128108692; #Primes_Corrected[P(5102)->P(5102)^2] = 119768821; actual
number primes in this interval = 119968411; (numPrimesCorrected-actualPrimes) = -199590;
(#Primes_Corrected/actualPrimes) = 0.9983363120480107
#Primes[P(5202)->P(5202)^2] = 133557132; #Primes_Corrected[P(5202)->P(5202)^2] = 124849987; actual
number primes in this interval = 125055792; (numPrimesCorrected-actualPrimes) = -205805;
(#Primes_Corrected/actualPrimes) = 0.9983542945375933
#Primes[P(5302)->P(5302)^2] = 138877714; #Primes_Corrected[P(5302)->P(5302)^2] = 129811110; actual
number primes in this interval = 130031019; (numPrimesCorrected-actualPrimes) = -219909;
(#Primes_Corrected/actualPrimes) = 0.9983087958420137
#Primes[P(5402)->P(5402)^2] = 144712059; #Primes_Corrected[P(5402)->P(5402)^2] = 135251930; actual
number primes in this interval = 135469298; (numPrimesCorrected-actualPrimes) = -217368;
(#Primes_Corrected/actualPrimes) = 0.9983954445530528
#Primes[P(5502)->P(5502)^2] = 150259742; #Primes_Corrected[P(5502)->P(5502)^2] = 140424311; actual
number primes in this interval = 140657126; (numPrimesCorrected-actualPrimes) = -232815;
(#Primes_Corrected/actualPrimes) = 0.9983448047985852
#Primes[P(5602)->P(5602)^2] = 156235300; #Primes_Corrected[P(5602)->P(5602)^2] = 145996059; actual
number primes in this interval = 146229569; (numPrimesCorrected-actualPrimes) = -233510;
(#Primes_Corrected/actualPrimes) = 0.9984031273456054
#Primes[P(5702)->P(5702)^2] = 162137095; #Primes_Corrected[P(5702)->P(5702)^2] = 151498377; actual
number primes in this interval = 151742063; (numPrimesCorrected-actualPrimes) = -243686;
(#Primes_Corrected/actualPrimes) = 0.998394077454977
#Primes[P(5802)->P(5802)^2] = 167732066; #Primes_Corrected[P(5802)->P(5802)^2] = 156713555; actual
number primes in this interval = 156984829; (numPrimesCorrected-actualPrimes) = -271274;
(#Primes_Corrected/actualPrimes) = 0.9982719731471632
#Primes[P(5902)->P(5902)^2] = 173869997; #Primes_Corrected[P(5902)->P(5902)^2] = 162435585; actual
number primes in this interval = 162716558; (numPrimesCorrected-actualPrimes) = -280973;
(#Primes_Corrected/actualPrimes) = 0.9982732365811229
#Primes[P(6002)->P(6002)^2] = 180052174; #Primes_Corrected[P(6002)->P(6002)^2] = 168198489; actual
number primes in this interval = 168493957; (numPrimesCorrected-actualPrimes) = -295468;
(#Primes_Corrected/actualPrimes) = 0.9982464178225692
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#Primes[P(6102)->P(6102)^2] = 186719322; #Primes_Corrected[P(6102)->P(6102)^2] = 174413962; actual
number primes in this interval = 174706969; (numPrimesCorrected-actualPrimes) = -293007;
(#Primes_Corrected/actualPrimes) = 0.9983228659871033
#Primes[P(6202)->P(6202)^2] = 193401782; #Primes_Corrected[P(6202)->P(6202)^2] = 180643252; actual
number primes in this interval = 180938348; (numPrimesCorrected-actualPrimes) = -295096;
(#Primes_Corrected/actualPrimes) = 0.9983690798370725
#Primes[P(6302)->P(6302)^2] = 200476935; #Primes_Corrected[P(6302)->P(6302)^2] = 187238840; actual
number primes in this interval = 187522445; (numPrimesCorrected-actualPrimes) = -283605;
(#Primes_Corrected/actualPrimes) = 0.9984876210418439
#Primes[P(6402)->P(6402)^2] = 206726628; #Primes_Corrected[P(6402)->P(6402)^2] = 193063038; actual
number primes in this interval = 193375687; (numPrimesCorrected-actualPrimes) = -312649;
(#Primes_Corrected/actualPrimes) = 0.9983832041925725
#Primes[P(6502)->P(6502)^2] = 214621038; #Primes_Corrected[P(6502)->P(6502)^2] = 200422777; actual
number primes in this interval = 200699230; (numPrimesCorrected-actualPrimes) = -276453;
(#Primes_Corrected/actualPrimes) = 0.9986225507691285
#Primes[P(6602)->P(6602)^2] = 221182466; #Primes_Corrected[P(6602)->P(6602)^2] = 206537252; actual
number primes in this interval = 206840838; (numPrimesCorrected-actualPrimes) = -303586;
(#Primes_Corrected/actualPrimes) = 0.9985322724325841
#Primes[P(6702)->P(6702)^2] = 228489797; #Primes_Corrected[P(6702)->P(6702)^2] = 213347831; actual
number primes in this interval = 213649661; (numPrimesCorrected-actualPrimes) = -301830;
(#Primes_Corrected/actualPrimes) = 0.9985872666561357
#Primes[P(6802)->P(6802)^2] = 236130735; #Primes_Corrected[P(6802)->P(6802)^2] = 220469456; actual
number primes in this interval = 220761421; (numPrimesCorrected-actualPrimes) = -291965;
(#Primes_Corrected/actualPrimes) = 0.9986774636678933
#Primes[P(6902)->P(6902)^2] = 243443333; #Primes_Corrected[P(6902)->P(6902)^2] = 227284085; actual
number primes in this interval = 227584666; (numPrimesCorrected-actualPrimes) = -300581;
(#Primes_Corrected/actualPrimes) = 0.9986792563607955
#Primes[P(7002)->P(7002)^2] = 251189278; #Primes_Corrected[P(7002)->P(7002)^2] = 234502877; actual
number primes in this interval = 234797811; (numPrimesCorrected-actualPrimes) = -294934;
(#Primes_Corrected/actualPrimes) = 0.9987438809640351
#Primes[P(7102)->P(7102)^2] = 258517090; #Primes_Corrected[P(7102)->P(7102)^2] = 241330909; actual
number primes in this interval = 241643774; (numPrimesCorrected-actualPrimes) = -312865;
(#Primes_Corrected/actualPrimes) = 0.9987052635587458
#Primes[P(7202)->P(7202)^2] = 266207947; #Primes_Corrected[P(7202)->P(7202)^2] = 248497467; actual
number primes in this interval = 248818004; (numPrimesCorrected-actualPrimes) = -320537;
(#Primes_Corrected/actualPrimes) = 0.9987117612276963
#Primes[P(7302)->P(7302)^2] = 274302652; #Primes_Corrected[P(7302)->P(7302)^2] = 256040602; actual
number primes in this interval = 256356209; (numPrimesCorrected-actualPrimes) = -315607;
(#Primes_Corrected/actualPrimes) = 0.99876887319706
#Primes[P(7402)->P(7402)^2] = 282227322; #Primes_Corrected[P(7402)->P(7402)^2] = 263424623; actual
number primes in this interval = 263748195; (numPrimesCorrected-actualPrimes) = -323572;
(#Primes_Corrected/actualPrimes) = 0.9987731783339787
#Primes[P(7502)->P(7502)^2] = 290244219; #Primes_Corrected[P(7502)->P(7502)^2] = 270894346; actual
number primes in this interval = 271226154; (numPrimesCorrected-actualPrimes) = -331808;
(#Primes_Corrected/actualPrimes) = 0.9987766371527725
#Primes[P(7602)->P(7602)^2] = 298553447; #Primes_Corrected[P(7602)->P(7602)^2] = 278636531; actual
number primes in this interval = 278969578; (numPrimesCorrected-actualPrimes) = -333047;
(#Primes_Corrected/actualPrimes) = 0.9988061529777272
#Primes[P(7702)->P(7702)^2] = 306958576; #Primes_Corrected[P(7702)->P(7702)^2] = 286467836; actual
number primes in this interval = 286803001; (numPrimesCorrected-actualPrimes) = -335165;
(#Primes_Corrected/actualPrimes) = 0.9988313755475662
#Primes[P(7802)->P(7802)^2] = 315411759; #Primes_Corrected[P(7802)->P(7802)^2] = 294343612; actual
number primes in this interval = 294683086; (numPrimesCorrected-actualPrimes) = -339474;
(#Primes_Corrected/actualPrimes) = 0.9988480031052749
#Primes[P(7902)->P(7902)^2] = 323910151; #Primes_Corrected[P(7902)->P(7902)^2] = 302261213; actual
number primes in this interval = 302607332; (numPrimesCorrected-actualPrimes) = -346119;
(#Primes_Corrected/actualPrimes) = 0.9988562107939936
#Primes[P(8002)->P(8002)^2] = 332369739; #Primes_Corrected[P(8002)->P(8002)^2] = 310142253; actual
number primes in this interval = 310503684; (numPrimesCorrected-actualPrimes) = -361431;
(#Primes_Corrected/actualPrimes) = 0.9988359848252235
#Primes[P(8102)->P(8102)^2] = 340883764; #Primes_Corrected[P(8102)->P(8102)^2] = 318073751; actual
number primes in this interval = 318451118; (numPrimesCorrected-actualPrimes) = -377367;
(#Primes_Corrected/actualPrimes) = 0.9988149923844827
#Primes[P(8202)->P(8202)^2] = 350432903; #Primes_Corrected[P(8202)->P(8202)^2] = 326970732; actual
number primes in this interval = 327327046; (numPrimesCorrected-actualPrimes) = -356314;
(#Primes_Corrected/actualPrimes) = 0.9989114434497417
#Primes[P(8302)->P(8302)^2] = 359365721; #Primes_Corrected[P(8302)->P(8302)^2] = 335292287; actual
number primes in this interval = 335656434; (numPrimesCorrected-actualPrimes) = -364147;
(#Primes_Corrected/actualPrimes) = 0.9989151198573479
#Primes[P(8402)->P(8402)^2] = 368610615; #Primes_Corrected[P(8402)->P(8402)^2] = 343904666; actual
number primes in this interval = 344269421; (numPrimesCorrected-actualPrimes) = -364755;
(#Primes_Corrected/actualPrimes) = 0.9989404955022131
#Primes[P(8502)->P(8502)^2] = 378347584; #Primes_Corrected[P(8502)->P(8502)^2] = 352975778; actual
number primes in this interval = 353323485; (numPrimesCorrected-actualPrimes) = -347707;
(#Primes_Corrected/actualPrimes) = 0.999015896155332
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#Primes[P(8602)->P(8602)^2] = 388608124; #Primes_Corrected[P(8602)->P(8602)^2] = 362534967; actual number primes in this interval = 362849792; (numPrimesCorrected-actualPrimes) = -314825; (#Primes_Corrected/actualPrimes) = 0.9991323544702486
#Primes[P(8702)->P(8702)^2] = 397706907; #Primes_Corrected[P(8702)->P(8702)^2] = 371009997; actual number primes in this interval = 371349792; (numPrimesCorrected-actualPrimes) = -339795; (#Primes_Corrected/actualPrimes) = 0.9990849732319226
#Primes[P(8802)->P(8802)^2] = 407156260; #Primes_Corrected[P(8802)->P(8802)^2] = 379811753; actual number primes in this interval = 380163683; (numPrimesCorrected-actualPrimes) = -351930; (#Primes_Corrected/actualPrimes) = 0.9990742671755944
#Primes[P(8902)->P(8902)^2] = 417327007; #Primes_Corrected[P(8902)->P(8902)^2] = 389286120; actual number primes in this interval = 389623217; (numPrimesCorrected-actualPrimes) = -337097; (#Primes_Corrected/actualPrimes) = 0.9991348128517711
#Primes[P(9002)->P(9002)^2] = 426335790; #Primes_Corrected[P(9002)->P(9002)^2] = 397676288; actual number primes in this interval = 398052912; (numPrimesCorrected-actualPrimes) = -376624; (#Primes_Corrected/actualPrimes) = 0.99905383433044 7

EXAMINING THE #Twins[P(n)->P(n)^2] AND #Twins_Corrected[P(n)->P(n)^2] FORMULAE

#Twins[P(2)->P(2)^2] = 3; #Twins_Corrected[P(2)->P(2)^2] = 78; actual number twins in this interval = 2; (numTwinsCorrected-actualTwins) = 76; (#Twins_Corrected/actualTwins) = 39.0
#Twins[P(102)->P(102)^2] = 3267; #Twins_Corrected[P(102)->P(102)^2] = 4444; actual number twins in this interval = 3115; (numTwinsCorrected-actualTwins) = 1329; (#Twins_Corrected/actualTwins) = 1.426645264847512
#Twins[P(202)->P(202)^2] = 12448; #Twins_Corrected[P(202)->P(202)^2] = 13911; actual number twins in this interval = 11769; (numTwinsCorrected-actualTwins) = 2142; (#Twins_Corrected/actualTwins) = 1.1820035686974255
#Twins[P(302)->P(302)^2] = 28651; #Twins_Corrected[P(302)->P(302)^2] = 29670; actual number twins in this interval = 26777; (numTwinsCorrected-actualTwins) = 2893; (#Twins_Corrected/actualTwins) = 1.1080404825036412
#Twins[P(402)->P(402)^2] = 50442; #Twins_Corrected[P(402)->P(402)^2] = 50158; actual number twins in this interval = 46682; (numTwinsCorrected-actualTwins) = 3476; (#Twins_Corrected/actualTwins) = 1.074461248446939
#Twins[P(502)->P(502)^2] = 79852; #Twins_Corrected[P(502)->P(502)^2] = 77425; actual number twins in this interval = 73381; (numTwinsCorrected-actualTwins) = 4044; (#Twins_Corrected/actualTwins) = 1.0551096332838201
#Twins[P(602)->P(602)^2] = 116027; #Twins_Corrected[P(602)->P(602)^2] = 110580; actual number twins in this interval = 106042; (numTwinsCorrected-actualTwins) = 4538; (#Twins_Corrected/actualTwins) = 1.042794364497086
#Twins[P(702)->P(702)^2] = 158757; #Twins_Corrected[P(702)->P(702)^2] = 149426; actual number twins in this interval = 144399; (numTwinsCorrected-actualTwins) = 5027; (#Twins_Corrected/actualTwins) = 1.0348132604796432
#Twins[P(802)->P(802)^2] = 207053; #Twins_Corrected[P(802)->P(802)^2] = 193045; actual number twins in this interval = 187845; (numTwinsCorrected-actualTwins) = 5200; (#Twins_Corrected/actualTwins) = 1.0276823977215257
#Twins[P(902)->P(902)^2] = 260530; #Twins_Corrected[P(902)->P(902)^2] = 241103; actual number twins in this interval = 235854; (numTwinsCorrected-actualTwins) = 5249; (#Twins_Corrected/actualTwins) = 1.0222552935290476
#Twins[P(1002)->P(1002)^2] = 324354; #Twins_Corrected[P(1002)->P(1002)^2] = 298373; actual number twins in this interval = 292587; (numTwinsCorrected-actualTwins) = 5786; (#Twins_Corrected/actualTwins) = 1.019775314692724
#Twins[P(1102)->P(1102)^2] = 393699; #Twins_Corrected[P(1102)->P(1102)^2] = 360381; actual number twins in this interval = 354568; (numTwinsCorrected-actualTwins) = 5813; (#Twins_Corrected/actualTwins) = 1.0163945984973264
#Twins[P(1202)->P(1202)^2] = 467687; #Twins_Corrected[P(1202)->P(1202)^2] = 426342; actual number twins in this interval = 420699; (numTwinsCorrected-actualTwins) = 5643; (#Twins_Corrected/actualTwins) = 1.0134133905714062
#Twins[P(1302)->P(1302)^2] = 551104; #Twins_Corrected[P(1302)->P(1302)^2] = 500624; actual number twins in this interval = 495050; (numTwinsCorrected-actualTwins) = 5574; (#Twins_Corrected/actualTwins) = 1.0112594687405312
#Twins[P(1402)->P(1402)^2] = 647588; #Twins_Corrected[P(1402)->P(1402)^2] = 586497; actual number twins in this interval = 580258; (numTwinsCorrected-actualTwins) = 6239; (#Twins_Corrected/actualTwins) = 1.0107521137149338
#Twins[P(1502)->P(1502)^2] = 738169; #Twins_Corrected[P(1502)->P(1502)^2] = 666780; actual number twins in this interval = 661085; (numTwinsCorrected-actualTwins) = 5695; (#Twins_Corrected/actualTwins) = 1.008614625955815
#Twins[P(1602)->P(1602)^2] = 841342; #Twins_Corrected[P(1602)->P(1602)^2] = 758227; actual number twins in this interval = 752109; (numTwinsCorrected-actualTwins) = 6118; (#Twins_Corrected/actualTwins) = 1.0081344592339674
#Twins[P(1702)->P(1702)^2] = 957284; #Twins_Corrected[P(1702)->P(1702)^2] = 860959; actual number twins in this interval = 854421; (numTwinsCorrected-actualTwins) = 6538; (#Twins_Corrected/actualTwins) = 1.007651965483058
#Twins[P(1802)->P(1802)^2] = 1064568; #Twins_Corrected[P(1802)->P(1802)^2] = 955713; actual number twins in this interval = 950156; (numTwinsCorrected-actualTwins) = 5557; (#Twins_Corrected/actualTwins) = 1.0058485132967638
#Twins[P(1902)->P(1902)^2] = 1189250; #Twins_Corrected[P(1902)->P(1902)^2] = 1065911; actual number twins in this interval = 1060206; (numTwinsCorrected-actualTwins) = 5705; (#Twins_Corrected/actualTwins) = 1.0053810297244121

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#Twins[P(2002)->P(2002)^2] = 1322169; #Twins_Corrected[P(2002)->P(2002)^2] = 1183308; actual number
twins in this interval = 1177756; (numTwinsCorrected-actualTwins) = 5552;
(#Twins_Corrected/actualTwins) = 1.0047140494295932
#Twins[P(2102)->P(2102)^2] = 1451772; #Twins_Corrected[P(2102)->P(2102)^2] = 1297575; actual number
twins in this interval = 1293319; (numTwinsCorrected-actualTwins) = 4256;
(#Twins_Corrected/actualTwins) = 1.0032907581192265
#Twins[P(2202)->P(2202)^2] = 1610528; #Twins_Corrected[P(2202)->P(2202)^2] = 1437729; actual number
twins in this interval = 1431887; (numTwinsCorrected-actualTwins) = 5842;
(#Twins_Corrected/actualTwins) = 1.0040799308884012
#Twins[P(2302)->P(2302)^2] = 1755160; #Twins_Corrected[P(2302)->P(2302)^2] = 1565112; actual number
twins in this interval = 1559972; (numTwinsCorrected-actualTwins) = 5140;
(#Twins_Corrected/actualTwins) = 1.0032949309346577
#Twins[P(2402)->P(2402)^2] = 1915301; #Twins_Corrected[P(2402)->P(2402)^2] = 1706181; actual number
twins in this interval = 1701451; (numTwinsCorrected-actualTwins) = 4730;
(#Twins_Corrected/actualTwins) = 1.0027799801463575
#Twins[P(2502)->P(2502)^2] = 2073064; #Twins_Corrected[P(2502)->P(2502)^2] = 1844994; actual number
twins in this interval = 1840693; (numTwinsCorrected-actualTwins) = 4301;
(#Twins_Corrected/actualTwins) = 1.0023366199578094
#Twins[P(2602)->P(2602)^2] = 2237492; #Twins_Corrected[P(2602)->P(2602)^2] = 1989614; actual number
twins in this interval = 1986216; (numTwinsCorrected-actualTwins) = 3398;
(#Twins_Corrected/actualTwins) = 1.0017107907699867
#Twins[P(2702)->P(2702)^2] = 2412615; #Twins_Corrected[P(2702)->P(2702)^2] = 2143620; actual number
twins in this interval = 2141055; (numTwinsCorrected-actualTwins) = 2565;
(#Twins_Corrected/actualTwins) = 1.0011980075243279
#Twins[P(2802)->P(2802)^2] = 2611667; #Twins_Corrected[P(2802)->P(2802)^2] = 2318754; actual number
twins in this interval = 2314925; (numTwinsCorrected-actualTwins) = 3829;
(#Twins_Corrected/actualTwins) = 1.001654049267255
#Twins[P(2902)->P(2902)^2] = 2799486; #Twins_Corrected[P(2902)->P(2902)^2] = 2483787; actual number
twins in this interval = 2480618; (numTwinsCorrected-actualTwins) = 3169;
(#Twins_Corrected/actualTwins) = 1.0012775042348319
#Twins[P(3002)->P(3002)^2] = 3005759; #Twins_Corrected[P(3002)->P(3002)^2] = 2665073; actual number
twins in this interval = 2661589; (numTwinsCorrected-actualTwins) = 3484;
(#Twins_Corrected/actualTwins) = 1.001308992485316
#Twins[P(3102)->P(3102)^2] = 3218124; #Twins_Corrected[P(3102)->P(3102)^2] = 2851640; actual number
twins in this interval = 2847342; (numTwinsCorrected-actualTwins) = 4298;
(#Twins_Corrected/actualTwins) = 1.001509477962254
#Twins[P(3202)->P(3202)^2] = 3411397; #Twins_Corrected[P(3202)->P(3202)^2] = 3021185; actual number
twins in this interval = 3018956; (numTwinsCorrected-actualTwins) = 2229;
(#Twins_Corrected/actualTwins) = 1.0007383347090848
#Twins[P(3302)->P(3302)^2] = 3657811; #Twins_Corrected[P(3302)->P(3302)^2] = 3237683; actual number
twins in this interval = 3233644; (numTwinsCorrected-actualTwins) = 4039;
(#Twins_Corrected/actualTwins) = 1.0012490552454136
#Twins[P(3402)->P(3402)^2] = 3878487; #Twins_Corrected[P(3402)->P(3402)^2] = 3431287; actual number
twins in this interval = 3427940; (numTwinsCorrected-actualTwins) = 3347;
(#Twins_Corrected/actualTwins) = 1.0009763881514846
#Twins[P(3502)->P(3502)^2] = 4099403; #Twins_Corrected[P(3502)->P(3502)^2] = 3625010; actual number
twins in this interval = 3622835; (numTwinsCorrected-actualTwins) = 2175;
(#Twins_Corrected/actualTwins) = 1.0006003585589738
#Twins[P(3602)->P(3602)^2] = 4325732; #Twins_Corrected[P(3602)->P(3602)^2] = 3823433; actual number
twins in this interval = 3822540; (numTwinsCorrected-actualTwins) = 893; (#Twins_Corrected/actualTwins)
= 1.0002336142983461
#Twins[P(3702)->P(3702)^2] = 4573267; #Twins_Corrected[P(3702)->P(3702)^2] = 4040510; actual number
twins in this interval = 4039952; (numTwinsCorrected-actualTwins) = 558; (#Twins_Corrected/actualTwins)
= 1.0001381204529163
#Twins[P(3802)->P(3802)^2] = 4848050; #Twins_Corrected[P(3802)->P(3802)^2] = 4281560; actual number
twins in this interval = 4279135; (numTwinsCorrected-actualTwins) = 2425;
(#Twins_Corrected/actualTwins) = 1.000566703317376
#Twins[P(3902)->P(3902)^2] = 5092308; #Twins_Corrected[P(3902)->P(3902)^2] = 4495560; actual number
twins in this interval = 4494454; (numTwinsCorrected-actualTwins) = 1106;
(#Twins_Corrected/actualTwins) = 1.000246081059012
#Twins[P(4002)->P(4002)^2] = 5361137; #Twins_Corrected[P(4002)->P(4002)^2] = 4731170; actual number
twins in this interval = 4730080; (numTwinsCorrected-actualTwins) = 1090;
(#Twins_Corrected/actualTwins) = 1.0002304400771234
#Twins[P(4102)->P(4102)^2] = 5647772; #Twins_Corrected[P(4102)->P(4102)^2] = 4982403; actual number
twins in this interval = 4979960; (numTwinsCorrected-actualTwins) = 2443;
(#Twins_Corrected/actualTwins) = 1.0004905661892867
#Twins[P(4202)->P(4202)^2] = 5922100; #Twins_Corrected[P(4202)->P(4202)^2] = 5222695; actual number
twins in this interval = 5220799; (numTwinsCorrected-actualTwins) = 1896;
(#Twins_Corrected/actualTwins) = 1.0003631628032414
#Twins[P(4302)->P(4302)^2] = 6234360; #Twins_Corrected[P(4302)->P(4302)^2] = 5496352; actual number
twins in this interval = 5492026; (numTwinsCorrected-actualTwins) = 4326;
(#Twins_Corrected/actualTwins) = 1.0007876874581438
#Twins[P(4402)->P(4402)^2] = 6500561; #Twins_Corrected[P(4402)->P(4402)^2] = 5729325; actual number
twins in this interval = 5727822; (numTwinsCorrected-actualTwins) = 1503;
(#Twins_Corrected/actualTwins) = 1.0002624034056924
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#Twins[P(4502)->P(4502)^2] = 6778600; #Twins_Corrected[P(4502)->P(4502)^2] = 5972666; actual number
twins in this interval = 5974303; (numTwinsCorrected-actualTwins) = -1637;
(#Twins_Corrected/actualTwins) = 0.9997259931409572
#Twins[P(4602)->P(4602)^2] = 7105519; #Twins_Corrected[P(4602)->P(4602)^2] = 6259002; actual number
twins in this interval = 6259339; (numTwinsCorrected-actualTwins) = -337;
(#Twins_Corrected/actualTwins) = 0.9999461604492104
#Twins[P(4702)->P(4702)^2] = 7432777; #Twins_Corrected[P(4702)->P(4702)^2] = 6545554; actual number
twins in this interval = 6544433; (numTwinsCorrected-actualTwins) = 1121;
(#Twins_Corrected/actualTwins) = 1.0001712906221212
#Twins[P(4802)->P(4802)^2] = 7778044; #Twins_Corrected[P(4802)->P(4802)^2] = 6847886; actual number
twins in this interval = 6844632; (numTwinsCorrected-actualTwins) = 3254;
(#Twins_Corrected/actualTwins) = 1.0004754090504793
#Twins[P(4902)->P(4902)^2] = 8113294; #Twins_Corrected[P(4902)->P(4902)^2] = 7141321; actual number
twins in this interval = 7137442; (numTwinsCorrected-actualTwins) = 3879;
(#Twins_Corrected/actualTwins) = 1.0005434720170054
#Twins[P(5002)->P(5002)^2] = 8452102; #Twins_Corrected[P(5002)->P(5002)^2] = 7437816; actual number
twins in this interval = 7433138; (numTwinsCorrected-actualTwins) = 4678;
(#Twins_Corrected/actualTwins) = 1.0006293438921758
#Twins[P(5102)->P(5102)^2] = 8779432; #Twins_Corrected[P(5102)->P(5102)^2] = 7724145; actual number
twins in this interval = 7720616; (numTwinsCorrected-actualTwins) = 3529;
(#Twins_Corrected/actualTwins) = 1.0004570878800345
#Twins[P(5202)->P(5202)^2] = 9134604; #Twins_Corrected[P(5202)->P(5202)^2] = 8034904; actual number
twins in this interval = 8031074; (numTwinsCorrected-actualTwins) = 3830;
(#Twins_Corrected/actualTwins) = 1.0004768976104566
#Twins[P(5302)->P(5302)^2] = 9480013; #Twins_Corrected[P(5302)->P(5302)^2] = 8337012; actual number
twins in this interval = 8334010; (numTwinsCorrected-actualTwins) = 3002;
(#Twins_Corrected/actualTwins) = 1.000360210750887
#Twins[P(5402)->P(5402)^2] = 9859434; #Twins_Corrected[P(5402)->P(5402)^2] = 8668965; actual number
twins in this interval = 8664525; (numTwinsCorrected-actualTwins) = 4440;
(#Twins_Corrected/actualTwins) = 1.0005124343227125
#Twins[P(5502)->P(5502)^2] = 10218280; #Twins_Corrected[P(5502)->P(5502)^2] = 8982763; actual number
twins in this interval = 8979944; (numTwinsCorrected-actualTwins) = 2819;
(#Twins_Corrected/actualTwins) = 1.0003139217794677
#Twins[P(5602)->P(5602)^2] = 10605192; #Twins_Corrected[P(5602)->P(5602)^2] = 9321172; actual number
twins in this interval = 9317479; (numTwinsCorrected-actualTwins) = 3693;
(#Twins_Corrected/actualTwins) = 1.0003963518458159
#Twins[P(5702)->P(5702)^2] = 10986056; #Twins_Corrected[P(5702)->P(5702)^2] = 9654204; actual number
twins in this interval = 9650489; (numTwinsCorrected-actualTwins) = 3715;
(#Twins_Corrected/actualTwins) = 1.000384954586239
#Twins[P(5802)->P(5802)^2] = 11345141; #Twins_Corrected[P(5802)->P(5802)^2] = 9968042; actual number
twins in this interval = 9967068; (numTwinsCorrected-actualTwins) = 974; (#Twins_Corrected/actualTwins)
= 1.0000977218174893
#Twins[P(5902)->P(5902)^2] = 11739959; #Twins_Corrected[P(5902)->P(5902)^2] = 10313222; actual number
twins in this interval = 10312208; (numTwinsCorrected-actualTwins) = 1014;
(#Twins_Corrected/actualTwins) = 1.0000983300569577
#Twins[P(6002)->P(6002)^2] = 12136746; #Twins_Corrected[P(6002)->P(6002)^2] = 10660075; actual number
twins in this interval = 10659241; (numTwinsCorrected-actualTwins) = 834;
(#Twins_Corrected/actualTwins) = 1.0000782419686354
#Twins[P(6102)->P(6102)^2] = 12565170; #Twins_Corrected[P(6102)->P(6102)^2] = 11034657; actual number
twins in this interval = 11031932; (numTwinsCorrected-actualTwins) = 2725;
(#Twins_Corrected/actualTwins) = 1.0002470102245011
#Twins[P(6202)->P(6202)^2] = 12993577; #Twins_Corrected[P(6202)->P(6202)^2] = 11409165; actual number
twins in this interval = 11404637; (numTwinsCorrected-actualTwins) = 4528;
(#Twins_Corrected/actualTwins) = 1.000397031488157
#Twins[P(6302)->P(6302)^2] = 13447287; #Twins_Corrected[P(6302)->P(6302)^2] = 11805830; actual number
twins in this interval = 11798464; (numTwinsCorrected-actualTwins) = 7366;
(#Twins_Corrected/actualTwins) = 1.0006243185553645
#Twins[P(6402)->P(6402)^2] = 13844626; #Twins_Corrected[P(6402)->P(6402)^2] = 12152952; actual number
twins in this interval = 12147708; (numTwinsCorrected-actualTwins) = 5244;
(#Twins_Corrected/actualTwins) = 1.0004316863724416
#Twins[P(6502)->P(6502)^2] = 14351046; #Twins_Corrected[P(6502)->P(6502)^2] = 12595769; actual number
twins in this interval = 12585159; (numTwinsCorrected-actualTwins) = 10610;
(#Twins_Corrected/actualTwins) = 1.0008430564921746
#Twins[P(6602)->P(6602)^2] = 14767259; #Twins_Corrected[P(6602)->P(6602)^2] = 12959355; actual number
twins in this interval = 12950849; (numTwinsCorrected-actualTwins) = 8506;
(#Twins_Corrected/actualTwins) = 1.0006567909177229
#Twins[P(6702)->P(6702)^2] = 15232291; #Twins_Corrected[P(6702)->P(6702)^2] = 13365733; actual number
twins in this interval = 13355057; (numTwinsCorrected-actualTwins) = 10676;
(#Twins_Corrected/actualTwins) = 1.000799397561538
#Twins[P(6802)->P(6802)^2] = 15718473; #Twins_Corrected[P(6802)->P(6802)^2] = 13790615; actual number
twins in this interval = 13776658; (numTwinsCorrected-actualTwins) = 13957;
(#Twins_Corrected/actualTwins) = 1.0010130904026215
#Twins[P(6902)->P(6902)^2] = 16181770; #Twins_Corrected[P(6902)->P(6902)^2] = 14195365; actual number
twins in this interval = 14181161; (numTwinsCorrected-actualTwins) = 14204;
(#Twins_Corrected/actualTwins) = 1.0010016105169386
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#Twins[P(7002)->P(7002)^2] = 16672861; #Twins_Corrected[P(7002)->P(7002)^2] = 14624447; actual number twins in this interval = 14608496; (numTwinsCorrected-actualTwins) = 15951; (#Twins_Corrected/actualTwins) = 1.001091898851189
#Twins[P(7102)->P(7102)^2] = 17135173; #Twins_Corrected[P(7102)->P(7102)^2] = 15028237; actual number twins in this interval = 15013995; (numTwinsCorrected-actualTwins) = 14242; (#Twins_Corrected/actualTwins) = 1.0009485816399966
#Twins[P(7202)->P(7202)^2] = 17620548; #Twins_Corrected[P(7202)->P(7202)^2] = 15452208; actual number twins in this interval = 15437256; (numTwinsCorrected-actualTwins) = 14952; (#Twins_Corrected/actualTwins) = 1.0009685659161187
#Twins[P(7302)->P(7302)^2] = 18131630; #Twins_Corrected[P(7302)->P(7302)^2] = 15898673; actual number twins in this interval = 15881330; (numTwinsCorrected-actualTwins) = 17343; (#Twins_Corrected/actualTwins) = 1.0010920370019387
#Twins[P(7402)->P(7402)^2] = 18630448; #Twins_Corrected[P(7402)->P(7402)^2] = 16334337; actual number twins in this interval = 16316622; (numTwinsCorrected-actualTwins) = 17715; (#Twins_Corrected/actualTwins) = 1.001085702665662
#Twins[P(7502)->P(7502)^2] = 19134352; #Twins_Corrected[P(7502)->P(7502)^2] = 16774415; actual number twins in this interval = 16755791; (numTwinsCorrected-actualTwins) = 18624; (#Twins_Corrected/actualTwins) = 1.0011114963179
#Twins[P(7602)->P(7602)^2] = 19656530; #Twins_Corrected[P(7602)->P(7602)^2] = 17230466; actual number twins in this interval = 17209819; (numTwinsCorrected-actualTwins) = 20647; (#Twins_Corrected/actualTwins) = 1.0011997220888842
#Twins[P(7702)->P(7702)^2] = 20183990; #Twins_Corrected[P(7702)->P(7702)^2] = 17691102; actual number twins in this interval = 17669160; (numTwinsCorrected-actualTwins) = 21942; (#Twins_Corrected/actualTwins) = 1.0012418247386972
#Twins[P(7802)->P(7802)^2] = 20713615; #Twins_Corrected[P(7802)->P(7802)^2] = 18153591; actual number twins in this interval = 18130749; (numTwinsCorrected-actualTwins) = 22842; (#Twins_Corrected/actualTwins) = 1.0012598486692414
#Twins[P(7902)->P(7902)^2] = 21245209; #Twins_Corrected[P(7902)->P(7902)^2] = 18617761; actual number twins in this interval = 18593756; (numTwinsCorrected-actualTwins) = 24005; (#Twins_Corrected/actualTwins) = 1.0012910247934845
#Twins[P(8002)->P(8002)^2] = 21773264; #Twins_Corrected[P(8002)->P(8002)^2] = 19078789; actual number twins in this interval = 19054427; (numTwinsCorrected-actualTwins) = 24362; (#Twins_Corrected/actualTwins) = 1.0012785480245614
#Twins[P(8102)->P(8102)^2] = 22303915; #Twins_Corrected[P(8102)->P(8102)^2] = 19542051; actual number twins in this interval = 19517624; (numTwinsCorrected-actualTwins) = 24427; (#Twins_Corrected/actualTwins) = 1.001251535535268
#Twins[P(8202)->P(8202)^2] = 22901279; #Twins_Corrected[P(8202)->P(8202)^2] = 20063721; actual number twins in this interval = 20035338; (numTwinsCorrected-actualTwins) = 28383; (#Twins_Corrected/actualTwins) = 1.0014166469265455
#Twins[P(8302)->P(8302)^2] = 23457338; #Twins_Corrected[P(8302)->P(8302)^2] = 20549159; actual number twins in this interval = 20520080; (numTwinsCorrected-actualTwins) = 29079; (#Twins_Corrected/actualTwins) = 1.0014170997384026
#Twins[P(8402)->P(8402)^2] = 24032783; #Twins_Corrected[P(8402)->P(8402)^2] = 21051539; actual number twins in this interval = 21019814; (numTwinsCorrected-actualTwins) = 31725; (#Twins_Corrected/actualTwins) = 1.0015092902344427
#Twins[P(8502)->P(8502)^2] = 24639282; #Twins_Corrected[P(8502)->P(8502)^2] = 21581078; actual number twins in this interval = 21544819; (numTwinsCorrected-actualTwins) = 36259; (#Twins_Corrected/actualTwins) = 1.0016829568166714
#Twins[P(8602)->P(8602)^2] = 25278794; #Twins_Corrected[P(8602)->P(8602)^2] = 22139486; actual number twins in this interval = 22097318; (numTwinsCorrected-actualTwins) = 42168; (#Twins_Corrected/actualTwins) = 1.0019082858833819
#Twins[P(8702)->P(8702)^2] = 25841724; #Twins_Corrected[P(8702)->P(8702)^2] = 22630781; actual number twins in this interval = 22628832; (numTwinsCorrected-actualTwins) = 1949; (#Twins_Corrected/actualTwins) = 1.000086129058716
#Twins[P(8802)->P(8802)^2] = 26426466; #Twins_Corrected[P(8802)->P(8802)^2] = 23141142; actual number twins in this interval = 23139352; (numTwinsCorrected-actualTwins) = 1790; (#Twins_Corrected/actualTwins) = 1.0000773573953152
#Twins[P(8902)->P(8902)^2] = 27057038; #Twins_Corrected[P(8902)->P(8902)^2] = 23691595; actual number twins in this interval = 23686473; (numTwinsCorrected-actualTwins) = 5122; (#Twins_Corrected/actualTwins) = 1.0002162415653864
#Twins[P(9002)->P(9002)^2] = 27611307; #Twins_Corrected[P(9002)->P(9002)^2] = 24175199; actual number twins in this interval = 24172627; (numTwinsCorrected-actualTwins) = 2572; (#Twins_Corrected/actualTwins) = 1.0001064013439664

EXAMINING THE #Triplets[P(n)->P(n)^2] AND #Triplets_Corrected[P(n)->P(n)^2] FORMULAE

#Triplets[P(3)->P(3)^2] = 5; #Triplets_Corrected[P(3)->P(3)^2] = 35; actual number triplets in this interval = 5; (numTripletsCorrected-actualTriplets) = 30; (#Triplets_Corrected/actualTriplets) = 7.0
#Triplets[P(103)->P(103)^2] = 1271; #Triplets_Corrected[P(103)->P(103)^2] = 1262; actual number triplets in this interval = 1201; (numTripletsCorrected-actualTriplets) = 61; (#Triplets_Corrected/actualTriplets) = 1.0507910074937552
#Triplets[P(203)->P(203)^2] = 4305; #Triplets_Corrected[P(203)->P(203)^2] = 3893; actual number triplets in this interval = 3985; (numTripletsCorrected-actualTriplets) = -92; (#Triplets_Corrected/actualTriplets) = 0.9769134253450439
#Triplets[P(303)->P(303)^2] = 9167; #Triplets_Corrected[P(303)->P(303)^2] = 8013; actual number triplets in this interval = 8295; (numTripletsCorrected-actualTriplets) = -282; (#Triplets_Corrected/actualTriplets) = 0.966003616636528

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#Triplets[P(403)->P(403)^2] = 15526; #Triplets_Corrected[P(403)->P(403)^2] = 13336; actual number
triplets in this interval = 13899; (numTripletsCorrected-actualTriplets) = -563;
(#Triplets_Corrected/actualTriplets) = 0.9594934887401971
#Triplets[P(503)->P(503)^2] = 23832; #Triplets_Corrected[P(503)->P(503)^2] = 20252; actual number
triplets in this interval = 21166; (numTripletsCorrected-actualTriplets) = -914;
(#Triplets_Corrected/actualTriplets) = 0.9568175375602381
#Triplets[P(603)->P(603)^2] = 33605; #Triplets_Corrected[P(603)->P(603)^2] = 28351; actual number
triplets in this interval = 29575; (numTripletsCorrected-actualTriplets) = -1224;
(#Triplets_Corrected/actualTriplets) = 0.9586136939983094
#Triplets[P(703)->P(703)^2] = 45027; #Triplets_Corrected[P(703)->P(703)^2] = 37790; actual number
triplets in this interval = 39366; (numTripletsCorrected-actualTriplets) = -1576;
(#Triplets_Corrected/actualTriplets) = 0.9599654524208708
#Triplets[P(803)->P(803)^2] = 57767; #Triplets_Corrected[P(803)->P(803)^2] = 48292; actual number
triplets in this interval = 50211; (numTripletsCorrected-actualTriplets) = -1919;
(#Triplets_Corrected/actualTriplets) = 0.9617812829857999
#Triplets[P(903)->P(903)^2] = 71526; #Triplets_Corrected[P(903)->P(903)^2] = 59611; actual number
triplets in this interval = 61945; (numTripletsCorrected-actualTriplets) = -2334;
(#Triplets_Corrected/actualTriplets) = 0.9623214141577205
#Triplets[P(1003)->P(1003)^2] = 87936; #Triplets_Corrected[P(1003)->P(1003)^2] = 73108; actual number
triplets in this interval = 75902; (numTripletsCorrected-actualTriplets) = -2794;
(#Triplets_Corrected/actualTriplets) = 0.9631893757740244
#Triplets[P(1103)->P(1103)^2] = 105444; #Triplets_Corrected[P(1103)->P(1103)^2] = 87486; actual number
triplets in this interval = 90784; (numTripletsCorrected-actualTriplets) = -3298;
(#Triplets_Corrected/actualTriplets) = 0.9636720126894607
#Triplets[P(1203)->P(1203)^2] = 124045; #Triplets_Corrected[P(1203)->P(1203)^2] = 102746; actual number
triplets in this interval = 106710; (numTripletsCorrected-actualTriplets) = -3964;
(#Triplets_Corrected/actualTriplets) = 0.9628525911348514
#Triplets[P(1303)->P(1303)^2] = 144322; #Triplets_Corrected[P(1303)->P(1303)^2] = 119370; actual number
triplets in this interval = 124040; (numTripletsCorrected-actualTriplets) = -4670;
(#Triplets_Corrected/actualTriplets) = 0.9623508545630441
#Triplets[P(1403)->P(1403)^2] = 168242; #Triplets_Corrected[P(1403)->P(1403)^2] = 138984; actual number
triplets in this interval = 143870; (numTripletsCorrected-actualTriplets) = -4886;
(#Triplets_Corrected/actualTriplets) = 0.966038785014249
#Triplets[P(1503)->P(1503)^2] = 190060; #Triplets_Corrected[P(1503)->P(1503)^2] = 156840; actual number
triplets in this interval = 162190; (numTripletsCorrected-actualTriplets) = -5350;
(#Triplets_Corrected/actualTriplets) = 0.9670139959306986
#Triplets[P(1603)->P(1603)^2] = 215276; #Triplets_Corrected[P(1603)->P(1603)^2] = 177483; actual number
triplets in this interval = 183225; (numTripletsCorrected-actualTriplets) = -5742;
(#Triplets_Corrected/actualTriplets) = 0.9686614817846909
#Triplets[P(1703)->P(1703)^2] = 242831; #Triplets_Corrected[P(1703)->P(1703)^2] = 200035; actual number
triplets in this interval = 206143; (numTripletsCorrected-actualTriplets) = -6108;
(#Triplets_Corrected/actualTriplets) = 0.9703700829036155
#Triplets[P(1803)->P(1803)^2] = 268169; #Triplets_Corrected[P(1803)->P(1803)^2] = 220745; actual number
triplets in this interval = 227685; (numTripletsCorrected-actualTriplets) = -6940;
(#Triplets_Corrected/actualTriplets) = 0.9695192920043042
#Triplets[P(1903)->P(1903)^2] = 297765; #Triplets_Corrected[P(1903)->P(1903)^2] = 244946; actual number
triplets in this interval = 252365; (numTripletsCorrected-actualTriplets) = -7419;
(#Triplets_Corrected/actualTriplets) = 0.9706021040952588
#Triplets[P(2003)->P(2003)^2] = 328933; #Triplets_Corrected[P(2003)->P(2003)^2] = 270425; actual number
triplets in this interval = 278225; (numTripletsCorrected-actualTriplets) = -7800;
(#Triplets_Corrected/actualTriplets) = 0.9719651361308294
#Triplets[P(2103)->P(2103)^2] = 359630; #Triplets_Corrected[P(2103)->P(2103)^2] = 295504; actual number
triplets in this interval = 304120; (numTripletsCorrected-actualTriplets) = -8616;
(#Triplets_Corrected/actualTriplets) = 0.971669077995528
#Triplets[P(2203)->P(2203)^2] = 396576; #Triplets_Corrected[P(2203)->P(2203)^2] = 325703; actual number
triplets in this interval = 334086; (numTripletsCorrected-actualTriplets) = -8383;
(#Triplets_Corrected/actualTriplets) = 0.9749076585070909
#Triplets[P(2303)->P(2303)^2] = 429841; #Triplets_Corrected[P(2303)->P(2303)^2] = 352866; actual number
triplets in this interval = 361904; (numTripletsCorrected-actualTriplets) = -9038;
(#Triplets_Corrected/actualTriplets) = 0.9750265263716344
#Triplets[P(2403)->P(2403)^2] = 466902; #Triplets_Corrected[P(2403)->P(2403)^2] = 383133; actual number
triplets in this interval = 392499; (numTripletsCorrected-actualTriplets) = -9366;
(#Triplets_Corrected/actualTriplets) = 0.976137518821704
#Triplets[P(2503)->P(2503)^2] = 502866; #Triplets_Corrected[P(2503)->P(2503)^2] = 412489; actual number
triplets in this interval = 422504; (numTripletsCorrected-actualTriplets) = -10015;
(#Triplets_Corrected/actualTriplets) = 0.9762960824039536
#Triplets[P(2603)->P(2603)^2] = 541121; #Triplets_Corrected[P(2603)->P(2603)^2] = 443715; actual number
triplets in this interval = 454415; (numTripletsCorrected-actualTriplets) = -10700;
(#Triplets_Corrected/actualTriplets) = 0.9764532420804771
#Triplets[P(2703)->P(2703)^2] = 581188; #Triplets_Corrected[P(2703)->P(2703)^2] = 476416; actual number
triplets in this interval = 487801; (numTripletsCorrected-actualTriplets) = -11385;
(#Triplets_Corrected/actualTriplets) = 0.9766605644514874
#Triplets[P(2803)->P(2803)^2] = 626275; #Triplets_Corrected[P(2803)->P(2803)^2] = 513222; actual number
triplets in this interval = 524631; (numTripletsCorrected-actualTriplets) = -11409;
(#Triplets_Corrected/actualTriplets) = 0.9782532865957215
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#Triplets[P(2903)->P(2903)^2] = 668296; #Triplets_Corrected[P(2903)->P(2903)^2] = 547504; actual number triplets in this interval = 559743; (numTripletsCorrected-actualTriplets) = -12239; (#Triplets_Corrected/actualTriplets) = 0.9781346082041222
#Triplets[P(3003)->P(3003)^2] = 714760; #Triplets_Corrected[P(3003)->P(3003)^2] = 585418; actual number triplets in this interval = 598319; (numTripletsCorrected-actualTriplets) = -12901; (#Triplets_Corrected/actualTriplets) = 0.9784379235825705
#Triplets[P(3103)->P(3103)^2] = 762414; #Triplets_Corrected[P(3103)->P(3103)^2] = 624297; actual number triplets in this interval = 637667; (numTripletsCorrected-actualTriplets) = -13370; (#Triplets_Corrected/actualTriplets) = 0.9790329435269506
#Triplets[P(3203)->P(3203)^2] = 806179; #Triplets_Corrected[P(3203)->P(3203)^2] = 659983; actual number triplets in this interval = 674707; (numTripletsCorrected-actualTriplets) = -14724; (#Triplets_Corrected/actualTriplets) = 0.9781771939523378
#Triplets[P(3303)->P(3303)^2] = 860828; #Triplets_Corrected[P(3303)->P(3303)^2] = 704570; actual number triplets in this interval = 719579; (numTripletsCorrected-actualTriplets) = -15009; (#Triplets_Corrected/actualTriplets) = 0.9791419705133141
#Triplets[P(3403)->P(3403)^2] = 909824; #Triplets_Corrected[P(3403)->P(3403)^2] = 744522; actual number triplets in this interval = 760081; (numTripletsCorrected-actualTriplets) = -15559; (#Triplets_Corrected/actualTriplets) = 0.9795298132699015
#Triplets[P(3503)->P(3503)^2] = 959123; #Triplets_Corrected[P(3503)->P(3503)^2] = 784715; actual number triplets in this interval = 800901; (numTripletsCorrected-actualTriplets) = -16186; (#Triplets_Corrected/actualTriplets) = 0.9797902612183029
#Triplets[P(3603)->P(3603)^2] = 1008525; #Triplets_Corrected[P(3603)->P(3603)^2] = 824985; actual number triplets in this interval = 842203; (numTripletsCorrected-actualTriplets) = -17218; (#Triplets_Corrected/actualTriplets) = 0.9795559977820074
#Triplets[P(3703)->P(3703)^2] = 1063110; #Triplets_Corrected[P(3703)->P(3703)^2] = 869488; actual number triplets in this interval = 887260; (numTripletsCorrected-actualTriplets) = -17772; (#Triplets_Corrected/actualTriplets) = 0.9799697946486937
#Triplets[P(3803)->P(3803)^2] = 1123530; #Triplets_Corrected[P(3803)->P(3803)^2] = 918756; actual number triplets in this interval = 936273; (numTripletsCorrected-actualTriplets) = -17517; (#Triplets_Corrected/actualTriplets) = 0.9812907132855482
#Triplets[P(3903)->P(3903)^2] = 1177784; #Triplets_Corrected[P(3903)->P(3903)^2] = 962974; actual number triplets in this interval = 981103; (numTripletsCorrected-actualTriplets) = -18129; (#Triplets_Corrected/actualTriplets) = 0.9815218177907926
#Triplets[P(4003)->P(4003)^2] = 1236092; #Triplets_Corrected[P(4003)->P(4003)^2] = 1010501; actual number triplets in this interval = 1029058; (numTripletsCorrected-actualTriplets) = -18557; (#Triplets_Corrected/actualTriplets) = 0.981967002831716
#Triplets[P(4103)->P(4103)^2] = 1298648; #Triplets_Corrected[P(4103)->P(4103)^2] = 1061493; actual number triplets in this interval = 1080092; (numTripletsCorrected-actualTriplets) = -18599; (#Triplets_Corrected/actualTriplets) = 0.9827801705780619
#Triplets[P(4203)->P(4203)^2] = 1359224; #Triplets_Corrected[P(4203)->P(4203)^2] = 1110861; actual number triplets in this interval = 1130130; (numTripletsCorrected-actualTriplets) = -19269; (#Triplets_Corrected/actualTriplets) = 0.9829497491439038
#Triplets[P(4303)->P(4303)^2] = 1426639; #Triplets_Corrected[P(4303)->P(4303)^2] = 1165811; actual number triplets in this interval = 1184813; (numTripletsCorrected-actualTriplets) = -19002; (#Triplets_Corrected/actualTriplets) = 0.9839620260750008
#Triplets[P(4403)->P(4403)^2] = 1485379; #Triplets_Corrected[P(4403)->P(4403)^2] = 1213666; actual number triplets in this interval = 1233725; (numTripletsCorrected-actualTriplets) = -20059; (#Triplets_Corrected/actualTriplets) = 0.9837411092423352
#Triplets[P(4503)->P(4503)^2] = 1543797; #Triplets_Corrected[P(4503)->P(4503)^2] = 1261253; actual number triplets in this interval = 1282795; (numTripletsCorrected-actualTriplets) = -21542; (#Triplets_Corrected/actualTriplets) = 0.9832069816299565
#Triplets[P(4603)->P(4603)^2] = 1615850; #Triplets_Corrected[P(4603)->P(4603)^2] = 1319975; actual number triplets in this interval = 1341196; (numTripletsCorrected-actualTriplets) = -21221; (#Triplets_Corrected/actualTriplets) = 0.9841775549584103
#Triplets[P(4703)->P(4703)^2] = 1684963; #Triplets_Corrected[P(4703)->P(4703)^2] = 1376288; actual number triplets in this interval = 1397780; (numTripletsCorrected-actualTriplets) = -21492; (#Triplets_Corrected/actualTriplets) = 0.9846241897866617
#Triplets[P(4803)->P(4803)^2] = 1759231; #Triplets_Corrected[P(4803)->P(4803)^2] = 1436806; actual number triplets in this interval = 1458120; (numTripletsCorrected-actualTriplets) = -21314; (#Triplets_Corrected/actualTriplets) = 0.9853825473897896
#Triplets[P(4903)->P(4903)^2] = 1831150; #Triplets_Corrected[P(4903)->P(4903)^2] = 1495399; actual number triplets in this interval = 1516772; (numTripletsCorrected-actualTriplets) = -21373; (#Triplets_Corrected/actualTriplets) = 0.9859088907231938
#Triplets[P(5003)->P(5003)^2] = 1903334; #Triplets_Corrected[P(5003)->P(5003)^2] = 1554204; actual number triplets in this interval = 1575866; (numTripletsCorrected-actualTriplets) = -21662; (#Triplets_Corrected/actualTriplets) = 0.9862539073753733
#Triplets[P(5103)->P(5103)^2] = 1974138; #Triplets_Corrected[P(5103)->P(5103)^2] = 1611877; actual number triplets in this interval = 1634300; (numTripletsCorrected-actualTriplets) = -22423; (#Triplets_Corrected/actualTriplets) = 0.9862797527993636
#Triplets[P(5203)->P(5203)^2] = 2049566; #Triplets_Corrected[P(5203)->P(5203)^2] = 1673320; actual number triplets in this interval = 1696241; (numTripletsCorrected-actualTriplets) = -22921; (#Triplets_Corrected/actualTriplets) = 0.9864871795929941
#Triplets[P(5303)->P(5303)^2] = 2122744; #Triplets_Corrected[P(5303)->P(5303)^2] = 1732922; actual number triplets in this interval = 1756829; (numTripletsCorrected-actualTriplets) = -23907; (#Triplets_Corrected/actualTriplets) = 0.986391959604492

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#Triplets[P(5403)->P(5403)^2] = 2203144; #Triplets_Corrected[P(5403)->P(5403)^2] = 1798414; actual
number triplets in this interval = 1822675; (numTripletsCorrected-actualTriplets) = -24261;
(#Triplets_Corrected/actualTriplets) = 0.986689343958742
#Triplets[P(5503)->P(5503)^2] = 2280576; #Triplets_Corrected[P(5503)->P(5503)^2] = 1861479; actual
number triplets in this interval = 1886799; (numTripletsCorrected-actualTriplets) = -25320;
(#Triplets_Corrected/actualTriplets) = 0.9865804465658504
#Triplets[P(5603)->P(5603)^2] = 2362214; #Triplets_Corrected[P(5603)->P(5603)^2] = 1927972; actual
number triplets in this interval = 1953306; (numTripletsCorrected-actualTriplets) = -25334;
(#Triplets_Corrected/actualTriplets) = 0.9870301939378674
#Triplets[P(5703)->P(5703)^2] = 2443320; #Triplets_Corrected[P(5703)->P(5703)^2] = 1994027; actual
number triplets in this interval = 2019698; (numTripletsCorrected-actualTriplets) = -25671;
(#Triplets_Corrected/actualTriplets) = 0.987289683903237
#Triplets[P(5803)->P(5803)^2] = 2516408; #Triplets_Corrected[P(5803)->P(5803)^2] = 2053534; actual
number triplets in this interval = 2080588; (numTripletsCorrected-actualTriplets) = -27054;
(#Triplets_Corrected/actualTriplets) = 0.9869969450943675
#Triplets[P(5903)->P(5903)^2] = 2599654; #Triplets_Corrected[P(5903)->P(5903)^2] = 2121326; actual
number triplets in this interval = 2148747; (numTripletsCorrected-actualTriplets) = -27421;
(#Triplets_Corrected/actualTriplets) = 0.9872386092918338
#Triplets[P(6003)->P(6003)^2] = 2683130; #Triplets_Corrected[P(6003)->P(6003)^2] = 2189302; actual
number triplets in this interval = 2217358; (numTripletsCorrected-actualTriplets) = -28056;
(#Triplets_Corrected/actualTriplets) = 0.9873471040761121
#Triplets[P(6103)->P(6103)^2] = 2773754; #Triplets_Corrected[P(6103)->P(6103)^2] = 2263106; actual
number triplets in this interval = 2291091; (numTripletsCorrected-actualTriplets) = -27985;
(#Triplets_Corrected/actualTriplets) = 0.9877852953025437
#Triplets[P(6203)->P(6203)^2] = 2863058; #Triplets_Corrected[P(6203)->P(6203)^2] = 2335829; actual
number triplets in this interval = 2363947; (numTripletsCorrected-actualTriplets) = -28118;
(#Triplets_Corrected/actualTriplets) = 0.9881054862905133
#Triplets[P(6303)->P(6303)^2] = 2958452; #Triplets_Corrected[P(6303)->P(6303)^2] = 2413516; actual
number triplets in this interval = 2441172; (numTripletsCorrected-actualTriplets) = -27656;
(#Triplets_Corrected/actualTriplets) = 0.9886710153975222
#Triplets[P(6403)->P(6403)^2] = 3041435; #Triplets_Corrected[P(6403)->P(6403)^2] = 2481074; actual
number triplets in this interval = 2509743; (numTripletsCorrected-actualTriplets) = -28669;
(#Triplets_Corrected/actualTriplets) = 0.9885769180350339
#Triplets[P(6503)->P(6503)^2] = 3146815; #Triplets_Corrected[P(6503)->P(6503)^2] = 2566898; actual
number triplets in this interval = 2594188; (numTripletsCorrected-actualTriplets) = -27290;
(#Triplets_Corrected/actualTriplets) = 0.9894803306468151
#Triplets[P(6603)->P(6603)^2] = 3235298; #Triplets_Corrected[P(6603)->P(6603)^2] = 2638935; actual
number triplets in this interval = 2667299; (numTripletsCorrected-actualTriplets) = -28364;
(#Triplets_Corrected/actualTriplets) = 0.9893660215821324
#Triplets[P(6703)->P(6703)^2] = 3329966; #Triplets_Corrected[P(6703)->P(6703)^2] = 2716013; actual
number triplets in this interval = 2744942; (numTripletsCorrected-actualTriplets) = -28929;
(#Triplets_Corrected/actualTriplets) = 0.9894609795033921
#Triplets[P(6803)->P(6803)^2] = 3431587; #Triplets_Corrected[P(6803)->P(6803)^2] = 2798758; actual
number triplets in this interval = 2826723; (numTripletsCorrected-actualTriplets) = -27965;
(#Triplets_Corrected/actualTriplets) = 0.9901069188597539
#Triplets[P(6903)->P(6903)^2] = 3528823; #Triplets_Corrected[P(6903)->P(6903)^2] = 2877923; actual
number triplets in this interval = 2906316; (numTripletsCorrected-actualTriplets) = -28393;
(#Triplets_Corrected/actualTriplets) = 0.9902305874516054
#Triplets[P(7003)->P(7003)^2] = 3631121; #Triplets_Corrected[P(7003)->P(7003)^2] = 2961212; actual
number triplets in this interval = 2989341; (numTripletsCorrected-actualTriplets) = -28129;
(#Triplets_Corrected/actualTriplets) = 0.9905902337672416
#Triplets[P(7103)->P(7103)^2] = 3725914; #Triplets_Corrected[P(7103)->P(7103)^2] = 3038378; actual
number triplets in this interval = 3067191; (numTripletsCorrected-actualTriplets) = -28813;
(#Triplets_Corrected/actualTriplets) = 0.9906060626808046
#Triplets[P(7203)->P(7203)^2] = 3825715; #Triplets_Corrected[P(7203)->P(7203)^2] = 3119624; actual
number triplets in this interval = 3148506; (numTripletsCorrected-actualTriplets) = -28882;
(#Triplets_Corrected/actualTriplets) = 0.990826760374603
#Triplets[P(7303)->P(7303)^2] = 3930666; #Triplets_Corrected[P(7303)->P(7303)^2] = 3205066; actual
number triplets in this interval = 3233854; (numTripletsCorrected-actualTriplets) = -28788;
(#Triplets_Corrected/actualTriplets) = 0.9910979283542176
#Triplets[P(7403)->P(7403)^2] = 4034454; #Triplets_Corrected[P(7403)->P(7403)^2] = 3289556; actual
number triplets in this interval = 3318172; (numTripletsCorrected-actualTriplets) = -28616;
(#Triplets_Corrected/actualTriplets) = 0.9913759744823355
#Triplets[P(7503)->P(7503)^2] = 4136993; #Triplets_Corrected[P(7503)->P(7503)^2] = 3373024; actual
number triplets in this interval = 3401739; (numTripletsCorrected-actualTriplets) = -28715;
(#Triplets_Corrected/actualTriplets) = 0.9915587292264338
#Triplets[P(7603)->P(7603)^2] = 4244356; #Triplets_Corrected[P(7603)->P(7603)^2] = 3460423; actual
number triplets in this interval = 3488993; (numTripletsCorrected-actualTriplets) = -28570;
(#Triplets_Corrected/actualTriplets) = 0.9918113908511711
#Triplets[P(7703)->P(7703)^2] = 4352206; #Triplets_Corrected[P(7703)->P(7703)^2] = 3548215; actual
number triplets in this interval = 3576582; (numTripletsCorrected-actualTriplets) = -28367;
(#Triplets_Corrected/actualTriplets) = 0.9920686845709116
#Triplets[P(7803)->P(7803)^2] = 4463226; #Triplets_Corrected[P(7803)->P(7803)^2] = 3638588; actual
number triplets in this interval = 3667010; (numTripletsCorrected-actualTriplets) = -28422;
(#Triplets_Corrected/actualTriplets) = 0.9922492712046054
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#Triplets[P(7903)->P(7903)^2] = 4570672; #Triplets_Corrected[P(7903)->P(7903)^2] = 3726044; actual number triplets in this interval = 3754791; (numTripletsCorrected-actualTriplets) = -28747; (#Triplets_Corrected/actualTriplets) = 0.9923439147478514
#Triplets[P(8003)->P(8003)^2] = 4677814; #Triplets_Corrected[P(8003)->P(8003)^2] = 3813250; actual number triplets in this interval = 3842369; (numTripletsCorrected-actualTriplets) = -29119; (#Triplets_Corrected/actualTriplets) = 0.9924216024020598
#Triplets[P(8103)->P(8103)^2] = 4788076; #Triplets_Corrected[P(8103)->P(8103)^2] = 3902996; actual number triplets in this interval = 3932268; (numTripletsCorrected-actualTriplets) = -29272; (#Triplets_Corrected/actualTriplets) = 0.9925559498996508
#Triplets[P(8203)->P(8203)^2] = 4909928; #Triplets_Corrected[P(8203)->P(8203)^2] = 4002186; actual number triplets in this interval = 4031071; (numTripletsCorrected-actualTriplets) = -28885; (#Triplets_Corrected/actualTriplets) = 0.9928344105077782
#Triplets[P(8303)->P(8303)^2] = 5025302; #Triplets_Corrected[P(8303)->P(8303)^2] = 4096093; actual number triplets in this interval = 4125125; (numTripletsCorrected-actualTriplets) = -29032; (#Triplets_Corrected/actualTriplets) = 0.9929621526620406
#Triplets[P(8403)->P(8403)^2] = 5139674; #Triplets_Corrected[P(8403)->P(8403)^2] = 4189180; actual number triplets in this interval = 4218320; (numTripletsCorrected-actualTriplets) = -29140; (#Triplets_Corrected/actualTriplets) = 0.993092036640179
#Triplets[P(8503)->P(8503)^2] = 5262105; #Triplets_Corrected[P(8503)->P(8503)^2] = 4288833; actual number triplets in this interval = 4317077; (numTripletsCorrected-actualTriplets) = -28244; (#Triplets_Corrected/actualTriplets) = 0.9934576103229106
#Triplets[P(8603)->P(8603)^2] = 5392558; #Triplets_Corrected[P(8603)->P(8603)^2] = 4395020; actual number triplets in this interval = 4421864; (numTripletsCorrected-actualTriplets) = -26844; (#Triplets_Corrected/actualTriplets) = 0.9939292569830279
#Triplets[P(8703)->P(8703)^2] = 5506228; #Triplets_Corrected[P(8703)->P(8703)^2] = 4487527; actual number triplets in this interval = 4513455; (numTripletsCorrected-actualTriplets) = -25928; (#Triplets_Corrected/actualTriplets) = 0.9942553985804666
#Triplets[P(8803)->P(8803)^2] = 5625586; #Triplets_Corrected[P(8803)->P(8803)^2] = 4584666; actual number triplets in this interval = 4610164; (numTripletsCorrected-actualTriplets) = -25498; (#Triplets_Corrected/actualTriplets) = 0.9944691772353434
#Triplets[P(8903)->P(8903)^2] = 5754020; #Triplets_Corrected[P(8903)->P(8903)^2] = 4689199; actual number triplets in this interval = 4714555; (numTripletsCorrected-actualTriplets) = -25356; (#Triplets_Corrected/actualTriplets) = 0.9946217617569421
#Triplets[P(9003)->P(9003)^2] = 5865038; #Triplets_Corrected[P(9003)->P(9003)^2] = 4779536; actual number triplets in this interval = 4806432; (numTripletsCorrected-actualTriplets) = -26896; (#Triplets_Corrected/actualTriplets) = 0.9944041650854522

EXAMINING THE #Quadruplets[P(n)->P(n)^2] AND #Quadruplets_Corrected[P(n)->P(n)^2] FORMULAE

#Quadruplets[P(3)->P(3)^2] = 1; #Quadruplets_Corrected[P(3)->P(3)^2] = 22; actual number Quadruplets in this interval = 1; (numQuadrupletsCorrected-actualQuadruplets) = 21; (#Quadruplets_Corrected/actualQuadruplets) = 22.0
#Quadruplets[P(103)->P(103)^2] = 81; #Quadruplets_Corrected[P(103)->P(103)^2] = 113; actual number Quadruplets in this interval = 68; (numQuadrupletsCorrected-actualQuadruplets) = 45; (#Quadruplets_Corrected/actualQuadruplets) = 1.661764705882353
#Quadruplets[P(203)->P(203)^2] = 245; #Quadruplets_Corrected[P(203)->P(203)^2] = 267; actual number Quadruplets in this interval = 236; (numQuadrupletsCorrected-actualQuadruplets) = 31; (#Quadruplets_Corrected/actualQuadruplets) = 1.13135593220339
#Quadruplets[P(303)->P(303)^2] = 490; #Quadruplets_Corrected[P(303)->P(303)^2] = 482; actual number Quadruplets in this interval = 460; (numQuadrupletsCorrected-actualQuadruplets) = 22; (#Quadruplets_Corrected/actualQuadruplets) = 1.0478260869565217
#Quadruplets[P(403)->P(403)^2] = 796; #Quadruplets_Corrected[P(403)->P(403)^2] = 741; actual number Quadruplets in this interval = 747; (numQuadrupletsCorrected-actualQuadruplets) = -6; (#Quadruplets_Corrected/actualQuadruplets) = 0.9919678714859438
#Quadruplets[P(503)->P(503)^2] = 1184; #Quadruplets_Corrected[P(503)->P(503)^2] = 1065; actual number Quadruplets in this interval = 1068; (numQuadrupletsCorrected-actualQuadruplets) = -3; (#Quadruplets_Corrected/actualQuadruplets) = 0.9971910112359551
#Quadruplets[P(603)->P(603)^2] = 1628; #Quadruplets_Corrected[P(603)->P(603)^2] = 1429; actual number Quadruplets in this interval = 1444; (numQuadrupletsCorrected-actualQuadruplets) = -15; (#Quadruplets_Corrected/actualQuadruplets) = 0.989612188365651
#Quadruplets[P(703)->P(703)^2] = 2137; #Quadruplets_Corrected[P(703)->P(703)^2] = 1843; actual number Quadruplets in this interval = 1860; (numQuadrupletsCorrected-actualQuadruplets) = -17; (#Quadruplets_Corrected/actualQuadruplets) = 0.9908602150537634
#Quadruplets[P(803)->P(803)^2] = 2695; #Quadruplets_Corrected[P(803)->P(803)^2] = 2293; actual number Quadruplets in this interval = 2314; (numQuadrupletsCorrected-actualQuadruplets) = -21; (#Quadruplets_Corrected/actualQuadruplets) = 0.9909248055315472
#Quadruplets[P(903)->P(903)^2] = 3287; #Quadruplets_Corrected[P(903)->P(903)^2] = 2768; actual number Quadruplets in this interval = 2811; (numQuadrupletsCorrected-actualQuadruplets) = -43; (#Quadruplets_Corrected/actualQuadruplets) = 0.9847029526858769
#Quadruplets[P(1003)->P(1003)^2] = 3987; #Quadruplets_Corrected[P(1003)->P(1003)^2] = 3328; actual number Quadruplets in this interval = 3380; (numQuadrupletsCorrected-actualQuadruplets) = -52; (#Quadruplets_Corrected/actualQuadruplets) = 0.9846153846153847
#Quadruplets[P(1103)->P(1103)^2] = 4724; #Quadruplets_Corrected[P(1103)->P(1103)^2] = 3916; actual number Quadruplets in this interval = 3967; (numQuadrupletsCorrected-actualQuadruplets) = -51; (#Quadruplets_Corrected/actualQuadruplets) = 0.987143937484245
#Quadruplets[P(1203)->P(1203)^2] = 5499; #Quadruplets_Corrected[P(1203)->P(1203)^2] = 4531; actual number Quadruplets in this interval = 4574; (numQuadrupletsCorrected-actualQuadruplets) = -43; (#Quadruplets_Corrected/actualQuadruplets) = 0.9905990380411018

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#Quadruplets[P(1303)->P(1303)^2] = 6335; #Quadruplets_Corrected[P(1303)->P(1303)^2] = 5194; actual
number Quadruplets in this interval = 5238; (numQuadrupletsCorrected-actualQuadruplets) = -44;
(#Quadruplets_Corrected/actualQuadruplets) = 0.9915998472699503
#Quadruplets[P(1403)->P(1403)^2] = 7319; #Quadruplets_Corrected[P(1403)->P(1403)^2] = 5975; actual
number Quadruplets in this interval = 5997; (numQuadrupletsCorrected-actualQuadruplets) = -22;
(#Quadruplets_Corrected/actualQuadruplets) = 0.9963314990828748
#Quadruplets[P(1503)->P(1503)^2] = 8201; #Quadruplets_Corrected[P(1503)->P(1503)^2] = 6669; actual
number Quadruplets in this interval = 6722; (numQuadrupletsCorrected-actualQuadruplets) = -53;
(#Quadruplets_Corrected/actualQuadruplets) = 0.9921154418327879
#Quadruplets[P(1603)->P(1603)^2] = 9218; #Quadruplets_Corrected[P(1603)->P(1603)^2] = 7472; actual
number Quadruplets in this interval = 7562; (numQuadrupletsCorrected-actualQuadruplets) = -90;
(#Quadruplets_Corrected/actualQuadruplets) = 0.9880983866701931
#Quadruplets[P(1703)->P(1703)^2] = 10324; #Quadruplets_Corrected[P(1703)->P(1703)^2] = 8344; actual
number Quadruplets in this interval = 8441; (numQuadrupletsCorrected-actualQuadruplets) = -97;
(#Quadruplets_Corrected/actualQuadruplets) = 0.9885084705603602
#Quadruplets[P(1803)->P(1803)^2] = 11325; #Quadruplets_Corrected[P(1803)->P(1803)^2] = 9129; actual
number Quadruplets in this interval = 9221; (numQuadrupletsCorrected-actualQuadruplets) = -92;
(#Quadruplets_Corrected/actualQuadruplets) = 0.9900227741025919
#Quadruplets[P(1903)->P(1903)^2] = 12497; #Quadruplets_Corrected[P(1903)->P(1903)^2] = 10050; actual
number Quadruplets in this interval = 10118; (numQuadrupletsCorrected-actualQuadruplets) = -68;
(#Quadruplets_Corrected/actualQuadruplets) = 0.9932793042103183
#Quadruplets[P(2003)->P(2003)^2] = 13723; #Quadruplets_Corrected[P(2003)->P(2003)^2] = 11012; actual
number Quadruplets in this interval = 11053; (numQuadrupletsCorrected-actualQuadruplets) = -41;
(#Quadruplets_Corrected/actualQuadruplets) = 0.9962905998371483
#Quadruplets[P(2103)->P(2103)^2] = 14920; #Quadruplets_Corrected[P(2103)->P(2103)^2] = 11950; actual
number Quadruplets in this interval = 12054; (numQuadrupletsCorrected-actualQuadruplets) = -104;
(#Quadruplets_Corrected/actualQuadruplets) = 0.9913721586195454
#Quadruplets[P(2203)->P(2203)^2] = 16366; #Quadruplets_Corrected[P(2203)->P(2203)^2] = 13085; actual
number Quadruplets in this interval = 13095; (numQuadrupletsCorrected-actualQuadruplets) = -10;
(#Quadruplets_Corrected/actualQuadruplets) = 0.9992363497518136
#Quadruplets[P(2303)->P(2303)^2] = 17650; #Quadruplets_Corrected[P(2303)->P(2303)^2] = 14089; actual
number Quadruplets in this interval = 14090; (numQuadrupletsCorrected-actualQuadruplets) = -1;
(#Quadruplets_Corrected/actualQuadruplets) = 0.9999290276792051
#Quadruplets[P(2403)->P(2403)^2] = 19081; #Quadruplets_Corrected[P(2403)->P(2403)^2] = 15209; actual
number Quadruplets in this interval = 15232; (numQuadrupletsCorrected-actualQuadruplets) = -23;
(#Quadruplets_Corrected/actualQuadruplets) = 0.9984900210084033
#Quadruplets[P(2503)->P(2503)^2] = 20457; #Quadruplets_Corrected[P(2503)->P(2503)^2] = 16283; actual
number Quadruplets in this interval = 16316; (numQuadrupletsCorrected-actualQuadruplets) = -33;
(#Quadruplets_Corrected/actualQuadruplets) = 0.9979774454523167
#Quadruplets[P(2603)->P(2603)^2] = 21917; #Quadruplets_Corrected[P(2603)->P(2603)^2] = 17423; actual
number Quadruplets in this interval = 17440; (numQuadrupletsCorrected-actualQuadruplets) = -17;
(#Quadruplets_Corrected/actualQuadruplets) = 0.9990252293577981
#Quadruplets[P(2703)->P(2703)^2] = 23441; #Quadruplets_Corrected[P(2703)->P(2703)^2] = 18613; actual
number Quadruplets in this interval = 18640; (numQuadrupletsCorrected-actualQuadruplets) = -27;
(#Quadruplets_Corrected/actualQuadruplets) = 0.9985515021459227
#Quadruplets[P(2803)->P(2803)^2] = 25159; #Quadruplets_Corrected[P(2803)->P(2803)^2] = 19956; actual
number Quadruplets in this interval = 19952; (numQuadrupletsCorrected-actualQuadruplets) = 4;
(#Quadruplets_Corrected/actualQuadruplets) = 1.0002004811547716
#Quadruplets[P(2903)->P(2903)^2] = 26743; #Quadruplets_Corrected[P(2903)->P(2903)^2] = 21191; actual
number Quadruplets in this interval = 21215; (numQuadrupletsCorrected-actualQuadruplets) = -24;
(#Quadruplets_Corrected/actualQuadruplets) = 0.9988687249587556
#Quadruplets[P(3003)->P(3003)^2] = 28497; #Quadruplets_Corrected[P(3003)->P(3003)^2] = 22560; actual
number Quadruplets in this interval = 22580; (numQuadrupletsCorrected-actualQuadruplets) = -20;
(#Quadruplets_Corrected/actualQuadruplets) = 0.9991142604074402
#Quadruplets[P(3103)->P(3103)^2] = 30288; #Quadruplets_Corrected[P(3103)->P(3103)^2] = 23956; actual
number Quadruplets in this interval = 23987; (numQuadrupletsCorrected-actualQuadruplets) = -31;
(#Quadruplets_Corrected/actualQuadruplets) = 0.9987076333013716
#Quadruplets[P(3203)->P(3203)^2] = 31917; #Quadruplets_Corrected[P(3203)->P(3203)^2] = 25224; actual
number Quadruplets in this interval = 25344; (numQuadrupletsCorrected-actualQuadruplets) = -120;
(#Quadruplets_Corrected/actualQuadruplets) = 0.9952651515151515
#Quadruplets[P(3303)->P(3303)^2] = 33967; #Quadruplets_Corrected[P(3303)->P(3303)^2] = 26823; actual
number Quadruplets in this interval = 26949; (numQuadrupletsCorrected-actualQuadruplets) = -126;
(#Quadruplets_Corrected/actualQuadruplets) = 0.9953245018368029
#Quadruplets[P(3403)->P(3403)^2] = 35785; #Quadruplets_Corrected[P(3403)->P(3403)^2] = 28238; actual
number Quadruplets in this interval = 28396; (numQuadrupletsCorrected-actualQuadruplets) = -158;
(#Quadruplets_Corrected/actualQuadruplets) = 0.9944358360332441
#Quadruplets[P(3503)->P(3503)^2] = 37607; #Quadruplets_Corrected[P(3503)->P(3503)^2] = 29655; actual
number Quadruplets in this interval = 29809; (numQuadrupletsCorrected-actualQuadruplets) = -154;
(#Quadruplets_Corrected/actualQuadruplets) = 0.9948337750343856
#Quadruplets[P(3603)->P(3603)^2] = 39425; #Quadruplets_Corrected[P(3603)->P(3603)^2] = 31068; actual
number Quadruplets in this interval = 31251; (numQuadrupletsCorrected-actualQuadruplets) = -183;
(#Quadruplets_Corrected/actualQuadruplets) = 0.9941441873860036
#Quadruplets[P(3703)->P(3703)^2] = 41437; #Quadruplets_Corrected[P(3703)->P(3703)^2] = 32634; actual
number Quadruplets in this interval = 32841; (numQuadrupletsCorrected-actualQuadruplets) = -207;
(#Quadruplets_Corrected/actualQuadruplets) = 0.9936969032611674
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#Quadruplets[P(3803)->P(3803)^2] = 43668; #Quadruplets_Corrected[P(3803)->P(3803)^2] = 34371; actual number Quadruplets in this interval = 34530; (numQuadrupletsCorrected-actualQuadruplets) = -159; (#Quadruplets_Corrected/actualQuadruplets) = 0.9953953084274544
#Quadruplets[P(3903)->P(3903)^2] = 45651; #Quadruplets_Corrected[P(3903)->P(3903)^2] = 35912; actual number Quadruplets in this interval = 36089; (numQuadrupletsCorrected-actualQuadruplets) = -177; (#Quadruplets_Corrected/actualQuadruplets) = 0.9950954584499432
#Quadruplets[P(4003)->P(4003)^2] = 47783; #Quadruplets_Corrected[P(4003)->P(4003)^2] = 37569; actual number Quadruplets in this interval = 37778; (numQuadrupletsCorrected-actualQuadruplets) = -209; (#Quadruplets_Corrected/actualQuadruplets) = 0.9944676796018846
#Quadruplets[P(4103)->P(4103)^2] = 50071; #Quadruplets_Corrected[P(4103)->P(4103)^2] = 39348; actual number Quadruplets in this interval = 39501; (numQuadrupletsCorrected-actualQuadruplets) = -153; (#Quadruplets_Corrected/actualQuadruplets) = 0.9961266803372066
#Quadruplets[P(4203)->P(4203)^2] = 52274; #Quadruplets_Corrected[P(4203)->P(4203)^2] = 41059; actual number Quadruplets in this interval = 41191; (numQuadrupletsCorrected-actualQuadruplets) = -132; (#Quadruplets_Corrected/actualQuadruplets) = 0.9967954164744726
#Quadruplets[P(4303)->P(4303)^2] = 54731; #Quadruplets_Corrected[P(4303)->P(4303)^2] = 42970; actual number Quadruplets in this interval = 43046; (numQuadrupletsCorrected-actualQuadruplets) = -76; (#Quadruplets_Corrected/actualQuadruplets) = 0.9982344468707894
#Quadruplets[P(4403)->P(4403)^2] = 56848; #Quadruplets_Corrected[P(4403)->P(4403)^2] = 44612; actual number Quadruplets in this interval = 44676; (numQuadrupletsCorrected-actualQuadruplets) = -64; (#Quadruplets_Corrected/actualQuadruplets) = 0.9985674635150864
#Quadruplets[P(4503)->P(4503)^2] = 58945; #Quadruplets_Corrected[P(4503)->P(4503)^2] = 46239; actual number Quadruplets in this interval = 46369; (numQuadrupletsCorrected-actualQuadruplets) = -130; (#Quadruplets_Corrected/actualQuadruplets) = 0.9971964027690914
#Quadruplets[P(4603)->P(4603)^2] = 61555; #Quadruplets_Corrected[P(4603)->P(4603)^2] = 48267; actual number Quadruplets in this interval = 48392; (numQuadrupletsCorrected-actualQuadruplets) = -125; (#Quadruplets_Corrected/actualQuadruplets) = 0.9974169284179203
#Quadruplets[P(4703)->P(4703)^2] = 64045; #Quadruplets_Corrected[P(4703)->P(4703)^2] = 50200; actual number Quadruplets in this interval = 50279; (numQuadrupletsCorrected-actualQuadruplets) = -79; (#Quadruplets_Corrected/actualQuadruplets) = 0.9984287674774757
#Quadruplets[P(4803)->P(4803)^2] = 66722; #Quadruplets_Corrected[P(4803)->P(4803)^2] = 52279; actual number Quadruplets in this interval = 52248; (numQuadrupletsCorrected-actualQuadruplets) = 31; (#Quadruplets_Corrected/actualQuadruplets) = 1.000593324146379
#Quadruplets[P(4903)->P(4903)^2] = 69303; #Quadruplets_Corrected[P(4903)->P(4903)^2] = 54282; actual number Quadruplets in this interval = 54218; (numQuadrupletsCorrected-actualQuadruplets) = 64; (#Quadruplets_Corrected/actualQuadruplets) = 1.0011804197867866
#Quadruplets[P(5003)->P(5003)^2] = 71885; #Quadruplets_Corrected[P(5003)->P(5003)^2] = 56285; actual number Quadruplets in this interval = 56255; (numQuadrupletsCorrected-actualQuadruplets) = 30; (#Quadruplets_Corrected/actualQuadruplets) = 1.0005332859301395
#Quadruplets[P(5103)->P(5103)^2] = 74407; #Quadruplets_Corrected[P(5103)->P(5103)^2] = 58241; actual number Quadruplets in this interval = 58216; (numQuadrupletsCorrected-actualQuadruplets) = 25; (#Quadruplets_Corrected/actualQuadruplets) = 1.000429435206816
#Quadruplets[P(5203)->P(5203)^2] = 77097; #Quadruplets_Corrected[P(5203)->P(5203)^2] = 60328; actual number Quadruplets in this interval = 60369; (numQuadrupletsCorrected-actualQuadruplets) = -41; (#Quadruplets_Corrected/actualQuadruplets) = 0.9993208434792692
#Quadruplets[P(5303)->P(5303)^2] = 79694; #Quadruplets_Corrected[P(5303)->P(5303)^2] = 62341; actual number Quadruplets in this interval = 62411; (numQuadrupletsCorrected-actualQuadruplets) = -70; (#Quadruplets_Corrected/actualQuadruplets) = 0.9988784028456522
#Quadruplets[P(5403)->P(5403)^2] = 82555; #Quadruplets_Corrected[P(5403)->P(5403)^2] = 64561; actual number Quadruplets in this interval = 64572; (numQuadrupletsCorrected-actualQuadruplets) = -11; (#Quadruplets_Corrected/actualQuadruplets) = 0.9998296475252432
#Quadruplets[P(5503)->P(5503)^2] = 85297; #Quadruplets_Corrected[P(5503)->P(5503)^2] = 66686; actual number Quadruplets in this interval = 66828; (numQuadrupletsCorrected-actualQuadruplets) = -142; (#Quadruplets_Corrected/actualQuadruplets) = 0.9978751421559825
#Quadruplets[P(5603)->P(5603)^2] = 88188; #Quadruplets_Corrected[P(5603)->P(5603)^2] = 68928; actual number Quadruplets in this interval = 68954; (numQuadrupletsCorrected-actualQuadruplets) = -26; (#Quadruplets_Corrected/actualQuadruplets) = 0.9996229370304841
#Quadruplets[P(5703)->P(5703)^2] = 91053; #Quadruplets_Corrected[P(5703)->P(5703)^2] = 71149; actual number Quadruplets in this interval = 70932; (numQuadrupletsCorrected-actualQuadruplets) = 217; (#Quadruplets_Corrected/actualQuadruplets) = 1.003059268031354
#Quadruplets[P(5803)->P(5803)^2] = 93611; #Quadruplets_Corrected[P(5803)->P(5803)^2] = 73129; actual number Quadruplets in this interval = 73128; (numQuadrupletsCorrected-actualQuadruplets) = 1; (#Quadruplets_Corrected/actualQuadruplets) = 1.0000136746526638
#Quadruplets[P(5903)->P(5903)^2] = 96541; #Quadruplets_Corrected[P(5903)->P(5903)^2] = 75400; actual number Quadruplets in this interval = 75370; (numQuadrupletsCorrected-actualQuadruplets) = 30; (#Quadruplets_Corrected/actualQuadruplets) = 1.000398036353987
#Quadruplets[P(6003)->P(6003)^2] = 99472; #Quadruplets_Corrected[P(6003)->P(6003)^2] = 77671; actual number Quadruplets in this interval = 77791; (numQuadrupletsCorrected-actualQuadruplets) = -120; (#Quadruplets_Corrected/actualQuadruplets) = 0.9984574050982762
#Quadruplets[P(6103)->P(6103)^2] = 102660; #Quadruplets_Corrected[P(6103)->P(6103)^2] = 80142; actual number Quadruplets in this interval = 80178; (numQuadrupletsCorrected-actualQuadruplets) = -36; (#Quadruplets_Corrected/actualQuadruplets) = 0.9995509990271646
#Quadruplets[P(6203)->P(6203)^2] = 105792; #Quadruplets_Corrected[P(6203)->P(6203)^2] = 82568; actual number Quadruplets in this interval = 82701; (numQuadrupletsCorrected-actualQuadruplets) = -133; (#Quadruplets_Corrected/actualQuadruplets) = 0.9983917969552968

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#Quadruplets[P(6303)->P(6303)^2] = 109141; #Quadruplets_Corrected[P(6303)->P(6303)^2] = 85164; actual
number Quadruplets in this interval = 84967; (numQuadrupletsCorrected-actualQuadruplets) = 197;
(#Quadruplets_Corrected/actualQuadruplets) = 1.002318547200678
#Quadruplets[P(6403)->P(6403)^2] = 112026; #Quadruplets_Corrected[P(6403)->P(6403)^2] = 87397; actual
number Quadruplets in this interval = 87821; (numQuadrupletsCorrected-actualQuadruplets) = -424;
(#Quadruplets_Corrected/actualQuadruplets) = 0.9951719975859988
#Quadruplets[P(6503)->P(6503)^2] = 115727; #Quadruplets_Corrected[P(6503)->P(6503)^2] = 90267; actual
number Quadruplets in this interval = 90107; (numQuadrupletsCorrected-actualQuadruplets) = 160;
(#Quadruplets_Corrected/actualQuadruplets) = 1.001775666707359
#Quadruplets[P(6603)->P(6603)^2] = 118800; #Quadruplets_Corrected[P(6603)->P(6603)^2] = 92645; actual
number Quadruplets in this interval = 92616; (numQuadrupletsCorrected-actualQuadruplets) = 29;
(#Quadruplets_Corrected/actualQuadruplets) = 1.000313120843051
#Quadruplets[P(6703)->P(6703)^2] = 122093; #Quadruplets_Corrected[P(6703)->P(6703)^2] = 95196; actual
number Quadruplets in this interval = 95303; (numQuadrupletsCorrected-actualQuadruplets) = -107;
(#Quadruplets_Corrected/actualQuadruplets) = 0.9988772651438045
#Quadruplets[P(6803)->P(6803)^2] = 125634; #Quadruplets_Corrected[P(6803)->P(6803)^2] = 97939; actual
number Quadruplets in this interval = 97949; (numQuadrupletsCorrected-actualQuadruplets) = -10;
(#Quadruplets_Corrected/actualQuadruplets) = 0.9998979060531501
#Quadruplets[P(6903)->P(6903)^2] = 129007; #Quadruplets_Corrected[P(6903)->P(6903)^2] = 100550; actual
number Quadruplets in this interval = 100672; (numQuadrupletsCorrected-actualQuadruplets) = -122;
(#Quadruplets_Corrected/actualQuadruplets) = 0.9987881436745073
#Quadruplets[P(7003)->P(7003)^2] = 132558; #Quadruplets_Corrected[P(7003)->P(7003)^2] = 103300; actual
number Quadruplets in this interval = 103225; (numQuadrupletsCorrected-actualQuadruplets) = 75;
(#Quadruplets_Corrected/actualQuadruplets) = 1.0007265681763138
#Quadruplets[P(7103)->P(7103)^2] = 135827; #Quadruplets_Corrected[P(7103)->P(7103)^2] = 105830; actual
number Quadruplets in this interval = 105919; (numQuadrupletsCorrected-actualQuadruplets) = -89;
(#Quadruplets_Corrected/actualQuadruplets) = 0.9991597352694039
#Quadruplets[P(7203)->P(7203)^2] = 139273; #Quadruplets_Corrected[P(7203)->P(7203)^2] = 108497; actual
number Quadruplets in this interval = 108713; (numQuadrupletsCorrected-actualQuadruplets) = -216;
(#Quadruplets_Corrected/actualQuadruplets) = 0.9980131171065098
#Quadruplets[P(7303)->P(7303)^2] = 142899; #Quadruplets_Corrected[P(7303)->P(7303)^2] = 111304; actual
number Quadruplets in this interval = 111525; (numQuadrupletsCorrected-actualQuadruplets) = -221;
(#Quadruplets_Corrected/actualQuadruplets) = 0.9980183815288052
#Quadruplets[P(7403)->P(7403)^2] = 146475; #Quadruplets_Corrected[P(7403)->P(7403)^2] = 114072; actual
number Quadruplets in this interval = 114222; (numQuadrupletsCorrected-actualQuadruplets) = -150;
(#Quadruplets_Corrected/actualQuadruplets) = 0.9986867678730893
#Quadruplets[P(7503)->P(7503)^2] = 150000; #Quadruplets_Corrected[P(7503)->P(7503)^2] = 116799; actual
number Quadruplets in this interval = 117008; (numQuadrupletsCorrected-actualQuadruplets) = -209;
(#Quadruplets_Corrected/actualQuadruplets) = 0.99821379734719
#Quadruplets[P(7603)->P(7603)^2] = 153692; #Quadruplets_Corrected[P(7603)->P(7603)^2] = 119657; actual
number Quadruplets in this interval = 119761; (numQuadrupletsCorrected-actualQuadruplets) = -104;
(#Quadruplets_Corrected/actualQuadruplets) = 0.9991316037775235
#Quadruplets[P(7703)->P(7703)^2] = 157395; #Quadruplets_Corrected[P(7703)->P(7703)^2] = 122522; actual
number Quadruplets in this interval = 122691; (numQuadrupletsCorrected-actualQuadruplets) = -169;
(#Quadruplets_Corrected/actualQuadruplets) = 0.9986225558516925
#Quadruplets[P(7803)->P(7803)^2] = 161206; #Quadruplets_Corrected[P(7803)->P(7803)^2] = 125471; actual
number Quadruplets in this interval = 125502; (numQuadrupletsCorrected-actualQuadruplets) = -31;
(#Quadruplets_Corrected/actualQuadruplets) = 0.9997529919841915
#Quadruplets[P(7903)->P(7903)^2] = 164882; #Quadruplets_Corrected[P(7903)->P(7903)^2] = 128315; actual
number Quadruplets in this interval = 128284; (numQuadrupletsCorrected-actualQuadruplets) = 31;
(#Quadruplets_Corrected/actualQuadruplets) = 1.000241651336098
#Quadruplets[P(8003)->P(8003)^2] = 168539; #Quadruplets_Corrected[P(8003)->P(8003)^2] = 131144; actual
number Quadruplets in this interval = 131109; (numQuadrupletsCorrected-actualQuadruplets) = 35;
(#Quadruplets_Corrected/actualQuadruplets) = 1.0002669534509454
#Quadruplets[P(8103)->P(8103)^2] = 172302; #Quadruplets_Corrected[P(8103)->P(8103)^2] = 134055; actual
number Quadruplets in this interval = 134264; (numQuadrupletsCorrected-actualQuadruplets) = -209;
(#Quadruplets_Corrected/actualQuadruplets) = 0.9984433653101352
#Quadruplets[P(8203)->P(8203)^2] = 176476; #Quadruplets_Corrected[P(8203)->P(8203)^2] = 137285; actual
number Quadruplets in this interval = 137265; (numQuadrupletsCorrected-actualQuadruplets) = 20;
(#Quadruplets_Corrected/actualQuadruplets) = 1.0001457035660948
#Quadruplets[P(8303)->P(8303)^2] = 180410; #Quadruplets_Corrected[P(8303)->P(8303)^2] = 140328; actual
number Quadruplets in this interval = 140209; (numQuadrupletsCorrected-actualQuadruplets) = 119;
(#Quadruplets_Corrected/actualQuadruplets) = 1.0008487329629339
#Quadruplets[P(8403)->P(8403)^2] = 184301; #Quadruplets_Corrected[P(8403)->P(8403)^2] = 143337; actual
number Quadruplets in this interval = 143284; (numQuadrupletsCorrected-actualQuadruplets) = 53;
(#Quadruplets_Corrected/actualQuadruplets) = 1.0003698947544737
#Quadruplets[P(8503)->P(8503)^2] = 188474; #Quadruplets_Corrected[P(8503)->P(8503)^2] = 146566; actual
number Quadruplets in this interval = 146536; (numQuadrupletsCorrected-actualQuadruplets) = 30;
(#Quadruplets_Corrected/actualQuadruplets) = 1.0002047278484467
#Quadruplets[P(8603)->P(8603)^2] = 192928; #Quadruplets_Corrected[P(8603)->P(8603)^2] = 150012; actual
number Quadruplets in this interval = 149686; (numQuadrupletsCorrected-actualQuadruplets) = 326;
(#Quadruplets_Corrected/actualQuadruplets) = 1.0021778923880658
#Quadruplets[P(8703)->P(8703)^2] = 196774; #Quadruplets_Corrected[P(8703)->P(8703)^2] = 152986; actual
number Quadruplets in this interval = 152741; (numQuadrupletsCorrected-actualQuadruplets) = 245;
(#Quadruplets_Corrected/actualQuadruplets) = 1.001604022495597
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#Quadruplets[P(8803)->P(8803)^2] = 200818; #Quadruplets_Corrected[P(8803)->P(8803)^2] = 156113; actual
number Quadruplets in this interval = 156148; (numQuadrupletsCorrected-actualQuadruplets) = -35;
(#Quadruplets_Corrected/actualQuadruplets) = 0.9997758536772805
#Quadruplets[P(8903)->P(8903)^2] = 205178; #Quadruplets_Corrected[P(8903)->P(8903)^2] = 159485; actual
number Quadruplets in this interval = 159151; (numQuadrupletsCorrected-actualQuadruplets) = 334;
(#Quadruplets_Corrected/actualQuadruplets) = 1.0020986358866737
#Quadruplets[P(9003)->P(9003)^2] = 208912; #Quadruplets_Corrected[P(9003)->P(9003)^2] = 162371; actual
number Quadruplets in this interval = 162376; (numQuadrupletsCorrected-actualQuadruplets) = -5;
(#Quadruplets_Corrected/actualQuadruplets) = 0.9999692072720107
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http://www.prime-numbers.org/
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[1b] http://www.rankyouragent.com/primes/primes.htm