OPINION

Primes the solution to know them all

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ABSTRACT

The authors are convinced that numbers have a deeper meaning than their function as useful elements for mathematical calculations related to objective reality.

The numbers are present in the scientific, financial and everyday life.

Considering them important only for their practicality is a mistake that prevents a constructive evolution of our lives.

Numbers were given the correct importance in antiquity.

The scholar who more than others recognized the validity of the number was Pythagoras who believed that the number represented the substance of things and the true nature of the world. He developed the arithmetic of integers by studying their characteristics by classifying them into categories giving each number a more or less profound mystical-philosophical meaning. The Pythagoreans are credited with introducing other concepts such as the perfect number.

Key words: *Prime numbers; Economic growth; Causality; Vector error correction model; Positive divisors*

INTRODUCTION

They felt that ten was the most perfect number as it represents the sum of the first four integers: 1+2+3+4=10.

Some notions about natural numbers

Numbers are divided into odd or even numbers, an intuitive concept. Even numbers are all divisible numbers and are multiples of two.

Odd numbers can be divisible or even non-divisible.

For example, some odd numbers written in progression are not divisible: 3,5,7,11,13,17,19,23 etc.

This is why the need arose to distinguish divisible odd numbers from those not divisible. Undivided numbers have been called numbers first and it has always been very difficult to find a method to detect them.

Historically, one of the earliest methods of knowing prime numbers is attributed to Eratosthenes of Cyrene. You build a board with all the natural numbers from 1 to 100, eliminate all those that are multiples of two, then those that are multiples of three, then those that are multiples of five and seven. The remaining numbers are all prime numbers.

Examining this system it turned out that prime numbers are unpredictable, There are no rules in relation to their appearance in the sequence of natural numbers. Later in the history of prime numbers there have been numerous scholars. These include: Mersenne, Pierre de Fermat, Leonhard Euler, Christian Goldbach, John Napier, Friederich Gauss, Bernhard Riemann and others.

The question that has been tried to answer in the study of prime numbers is: how can one determine with certainty whether a number is prime? The most reliable method is to divide the number by all the numbers that precede it. If it is not divisible by any of the numbers that precede it, the number is certainly a prime number. It has always been difficult to use this method if you examine many numbers and for very large numbers even using computer methods.

Examination of the proposed method

Greater importance has been given to the idea in the study of prime numbers to find a method to know all odd natural divisible numbers Because if you can find them all in a series of numbers it is certain that all the other numbers that make up the series of numbers are prime numbers.

The search for divisible numbers in a series of numbers starts with the square of the odd number less than the series. For example, in a series of odd numbers starting with 3, the divisible numbers start from the square of the number 3.
Which is 9 being 3 the smallest number in the series. It is certain that before 9 there are numbers divisible by 3. The odd divisible numbers all start from the square of the smaller number and then the first number from which you start the search for divisible numbers becomes larger and larger considering increasing numbers. After

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finding all the divisible numbers it is certain that those that remain are all prime numbers. The distance between the divisible numbers is certain only for the first two subsequent numbers, then varies. For example, after 25 the next number divisible by 5 is the odd number 35 with distance 10 from 25. The next issue divisible by 5 which is 55 is far from the previous one of 20.

To find prime numbers in a series of odd numbers it was decided to write a series of numbers, to eliminate divisible numbers, the numbers that remain are prime numbers.
Example of odd numbers 9 to 55: 9 11 13 15 17 19 21 23 25 27 29 31 33 35 37 39 41 43 45 47 49 51 53 55

Numbers divisible by 3: 9 15 21 27 33 39 45 51

Numbers divisible by 5: 25 35 55

Number divisible by 7: 49

The remaining numbers are all prime numbers: 11 13 17 19 23 29 31 37 41 43 47 53

It is simpler instead of dividing the numbers to determine whether they are divisible or first find the divisible numbers knowing how far they are from each other, eliminate them and find prime numbers without doing complex calculations. Given the difficulty of finding a method to know prime numbers, a collaboration was born between two neighbors to try to understand how to know prime numbers in a set of numbers. Much consideration was immediately given to the first number 7 because this number, considered the king of numbers, is the only prime number that has its divisible numbers that repeat at a fixed distance. Starting with 77, number divisible by 7, following its square 49, divisible numbers are repeated at a fixed distance. To 77 are added the distances in succession 14,28,14,28,42.14,42,28 which are always repeated.
77+14=91+28=119+14=133+28=161+42=203+14=217+42=259+28=287.

Solution of the problem: How do you find all prime numbers?
Examining the numbers divisible by 7 we see that there are two numbers with final number 1 (91,161), two numbers with final number 3 (133, 203), two numbers with final number 7 (217,287), two numbers with final number 9 (119,259). It is therefore impossible that there is not at least a divisible number with final number 1,3,7,9.

Knowing the divisible numbers it is therefore certain that the numbers that remain in a series of numbers divisible by 7 they are all prime numbers. You write the numbers divisible by 7 and under these numbers you write the result of the division:

77	91	119	133	161	203	217	259
11	13	17	19	23	29	31	37
287	301	329	343	371	413	427	469
41	43	47	49/7	53	59	61	67

To find all divisible numbers for prime numbers from 7 onwards, considering the result obtained by dividing the numbers by 7, of 8 numbers is written at a distance of 30 (11-41, 13-43, 17-47, etc.).

All the squares of prime numbers from 49 onwards. The distance between divisible numbers is equal to prime number by 30 or multiple of the number by 30.

Some examples: the distance between 161 and 371 divisible by 7 is 7 x 30=210, between 121 and 451 divisible by 11 is 11 x 30=330, between 403 and 793 divisible by 13 is 390, between 323 and 1343 divisible by 17 is 17+17=34 x 30=1020. The numbers that remain after finding the divisible numbers are all Primes.

Th stops at number 10,009, it can be continued

11	13	17	19	23	29	31	37
41	43	47	49/7	53	59	61	67
71	73	77/7	79	83	89	91/7	97
101	103	107	109	113	119/7	121/11	127
131	133/7	137	139	143/11	149	151	157
161/7	163	167	169/13	173	179	181	187/11
191	193	197	199	203/7	209/11	211	217/7
221/13	223	227	229	233	239	241	247/13
251	253/11	257	259/7	263	269	271	277
281	283	287/7	289/17	293	299/13	301/7	307
311	313	317	319/11	323/17	329/7	331	337
341/11	343/7	347	349	353	359	361/19	367
371/7	373	377/13	379	383	389	391/17	397
401	403/13	407/11	409	413/7	419	421	427/7
431	433	437/19	439	443	449	451/11	457
461	463	467	469/7	473/11	479	481/13	487
491	493/17	497/7	499	503	509	511/7	517/11
521	523	527/17	529/23	533/13	539/7	541	547
551/19	553/7	557	559/13	563	569	571	577
581/7	583/11	587	589/19	593	599	601	607
611/13	613	617	619	623/7	629/17	631	637/7
641	643	647	649/11	653	659	661	667/23
671/11	673	677	679/7	683	689/13	691	697/17
701	703/19	707/7	709	713/23	719	721/7	727
731/17	733	737/11	739	743	749/7	751	757
761	763/7	767/13	769	773	779/19	781/11	787
791/7	793/13	797	799/17	803/11	809	811	817/19
821	823	827	829	833/7	839	841/29	847/7
851/23	853	857	859	863	869/11	871/13	877
881	883	887	889/7	893/19	899/29	901/17	907

Continuing the numbers have more and more digits and for convenience it is divided.
The two parts of four numbers each.

911	913/11	917/7	919
941	943/23	947	949/13
971	973/7	977	979/11
1001/7	1003/17	1007/19	1009
1031	1033	1037/17	1039
1061	1063	1067/11	1069
1091	1093	1097	1099/7
1121/19	1123	1127/7	1129
1151	1153	1157/13	1159/19
1181	1183/7	1187	1189/29

923/13	929	931/7	937
953	959/7	961/31	967
983	989/23	991	997
1013	1019	1021	1027/13
1043/7	1049	1051	1057/7
1073/29	1079/13	1081/23	1087
1103	1109	1111/11	1117
1133/11	1139/17	1141/7	1147/31
1163	1169/7	1171	1177/11
1193	1199/11	1201	1207/17

1211/7	1213	1217	1219/23
1241/17	1243/11	1247/29	1249
1271/31	1273/19	1277	1279
1301	1303	1307	1309/7
1331/11	1333/31	1337/7	1339/13
1361	1363/29	1367	1369/37
1391/13	1393/7	1397/11	1399
1421/7	1423	1427	1429
1451	1453	1457/31	1459
1481	1483	1487	1489
1223	1229	1231	1237
1253/7	1259	1261/13	1267/7
1283	1289	1291	1297
1313/13	1319	1321	1327
1343/17	1349/19	1351/7	1357/23
1373	1379/7	1381	1387/19
1403/23	1409	1411/17	1417/13
1433	1439	1441/11	1447
1463/7	1469/13	1471	1477/7

1511	1513/7	1517/37	1519/7
1541/23	1543	1547/7	1549
1571	1573/11	1577/19	1579
1601	1603/7	1607	1609
1631/7	1633/23	1637	1639/11
1661/11	1663	1667	1669
1691/19	1693	1697	1699
1721	1723	1727/11	1729/7
1751/17	1753	1757/7	1759
1781/13	1783	1787	1789

1493	1499	1501/19	1507/11
1523	1529/11	1531	1537/29
1553	1559	1561/7	1567
1583	1589/7	1591/37	1597

1613	1619	1621	1627
1643/31	1649/17	1651/13	1657
1673/7	1679/23	1681/41	1687/7
1703/13	1709	1711/29	1717/17
1733	1739	1741	1747
1763/41	1769/29	1771/7	1777
1811	1813/7	1817/23	1819/17
1841/7	1843/19	1847	1849/43
1871	1873	1877	1879
1901	1903/11	1907	1909/23
1931	1933	1937/13	1939/7
1961/37	1963/13	1967/7	1969/11
1991/11	1993	1997	1999
2021/43	2023/7	2027	2029
2051/7	2053	2057/11	2059/29
2081	2083	2087	2089
1793/11	1799/7	1801	1807/13
1823	1829/31	1831	1837/11
1853/17	1859/11	1861	1867
1883/7	1889	1891/31	1897/7
1913	1919/19	1921/17	1927/41
1943/29	1949	1951	1957/19
1973	1979	1981/7	1987
2003	2009/7	2011	2017
2033/19	2039	2041/13	2047/23
2063	2069	2071/19	2077/31
2111	2113	2117/29	2119/13
2141	2143	2147/19	2149/7
2171/13	2173/41	2177/7	2179
2201/31	2203	2207	2209/47
2231/23	2233/7	2237	2239
2261/7	2263/31	2267	2269
2291/29	2293	2297	2299/11
2321/11	2323/23	2327/13	2329/17
2351	2353/13	2357	2359/7
2381	2383	2387/7	2389
2093/7	2099	2101/11	2107/7
2123/11	2129	2131	2137
2153	2159/17	2161	2167/11
2183/37	2189/11	2191/7	2197/13
2213	2219/7	2221	2227/17
2243	2249/13	2251	2257/37
2273	2279/43	2281	2287
2303/7	2309	2311	2317/7
2333	2339	2341	2347

2363/17	2369/23	2371	2377
2411	2413/19	2417	2419/41
2441	2443/7	2447	2449/31
2471/7	2473	2477	2479/37
2501/41	2503	2507/23	2509/13
2531	2533/17	2537/43	2539
2561/13	2563/11	2567/17	2569/7
2591	2593	2597/7	2599/23
2621	2623/43	2627/37	2629/11
2651/11	2653/7	2657	2659
2681/7	2683	2687	2689
2393	2399	2401/7	2407/29
2423	2429/7	2431/11	2437
2453/11	2459	2461/23	2467
2483/13	2489/19	2491/47	2497/11
2513/7	2519/11	2521	2527/7
2543	2549	2551	2557
2573/31	2579	2581/29	2587/13
2603/19	2609	2611/7	2617
2633	2639/7	2641/19	2647
2663	2669/17	2671	2677
2711	2713	2717/11	2719
2741	2743/13	2747/41	2749
2771/17	2773/47	2777	2779/7
2801	2803	2807/7	2809/53
2831/19	2833	2837	2839/17
2861	2863/7	2867/47	2869/19
2891/7	2893/11	2897	2899/13
2921/23	2923/37	2927	2929/29
2951/13	2953	2957	2959/11
2981/11	2983/19	2987/29	2989/7
2693	2699	2701/37	2707
2723/7	2729	2731	2737/7
2753	2759/31	2761/11	2767
2783/11	2789	2791	2797
2813/29	2819	2821/7	2827/11
2843	2849/7	2851	2857
2873/13	2879	2881/43	2887
2903	2909	2911/41	2917
2933/7	2939	2941/17	2947/7
2963	2969	2971	2977/13
3011	3013/23	3017/7	3019
3041	3043/17	3047/11	3049
3071/37	3073/7	3077/17	3079
3101/7	3103/29	3107/13	3109

3131/31	3133/13	3137	3139/43
3161/29	3163	3167	3169
3191	3193/31	3197/23	3199/7
3221	3223/11	3227/7	3229
3251	3253	3257	3259
3281/17	3283/7	3287/19	3289/11
2993/41	2999	3001	3007/31
3023	3029/13	3031/7	3037
3053/43	3059/7	3061	3067
3083	3089	3091/11	3097/19
3113/11	3119	3121	3127/53
3143/7	3149/47	3151/23	3157/7
3173/19	3179/11	3181	3187
3203	3209	3211/13	3217
3233/53	3239/41	3241/7	3247/17
3263/13	3269/7	3271	3277/29
3311/7	3313	3317/31	3319
3341/13	3343	3347	3349/17
3371	3373	3377/11	3379/31
3401/19	3403/41	3407	3409/7
3431/47	3433	3437/7	3439/19
3461	3463	3467	3469
3491	3493/7	3497/13	3499
3521/7	3523/13	3527	3529
3551/53	3553/11	3557	3559
3581	3583	3587/17	3589/37
3293/37	3299	3301	3307
3323	3329	3331	3337/47
3353/7	3359	3361	3367/7
3383/17	3389	3391	3397/43
3413	3419/13	3421/11	3427/23
3443/11	3449	3451/7	3457
3473/23	3479/7	3481/59	3487/11
3503/31	3509/11	3511	3517
3533	3539	3541	3547
3563/7	3569/43	3571	3577/7
3611/23	3613	3617	3619/7
3641/11	3643	3647/7	3649/41
3671	3673	3677	3679/13
3701	3703/7	3707/11	3709
3731/7	3733	3737/37	3739
3761	3763/53	3767	3769
3791/17	3793	3797	3799/29
3821	3823	3827/43	3829/7
3851	3853	3857/7	3859/17

3881	3883/11	3887/13	3889
3593	3599/59	3601/13	3607
3623	3629/19	3631	3637
3653/13	3659	3661/7	3667/19
3683/29	3689/7	3691	3697
3713/47	3719	3721/61	3727
3743/19	3749/23	3751/11	3757/13
3773/7	3779	3781/19	3787/7
3803	3809/13	3811/37	3817/11
3833	3839/11	3841/23	3847
3863	3869/53	3871/7	3877
3911	3913/7	3917	3919
3941/7	3943	3947	3949/11
3971/11	3973/29	3977/41	3979/23
4001	4003	4007	4009/19
4031/29	4033/37	4037/11	4039/7
4061/31	4063/17	4067/7	4069/13
4091	4093	4097/17	4099
4121/13	4123/7	4127	4129
4151/7	4153	4157	4159
4181/37	4183/47	4187/53	4189/59
3893/17	3899/7	3901/47	3907
3923	3929	3931	3937/31
3953/59	3959/37	3961/17	3967
3983/7	3989	3991/13	3997/7
4013	4019	4021	4027
4043/13	4049	4051	4057
4073	4079	4081/7	4087/61
4103/11	4109/7	4111	4117/23
4133	4139	4141/41	4147/11
4163/23	4169/11	4171/43	4177
4211	4213/11	4217	4219
4241	4243	4247/31	4249/7
4271	4273	4277/7	4279/11
4301/11	4303/13	4307/59	4309/31
4331/61	4333/7	4337	4339
4361/7	4363	4367/11	4369/17
4391	4393/23	4397	4399/53
4421	4423	4427/19	4429/43
4451	4453/61	4457	4459/7
4481	4483	4487/7	4489/67
4193/7	4199/13	4201	4207/7
4223/41	4229	4231	4237/19
4253	4259	4261	4267/17
4283	4289	4291/7	4297

4313/19	4319/7	4321/29	4327
4343/43	4349	4351/19	4357
4373	4379/29	4381/13	4387/41
4403/7	4409	4411/11	4417/7
4433/11	4439/23	4441	4447
4463	4469/41	4471/17	4477/11
4511/13	4513	4517	4519
4541/19	4543/7	4547	4549
4571/7	4573/17	4577/23	4579/19
4601/43	4603	4607/17	4609/11
4631/11	4633/41	4637	4639
4661/59	4663	4667/13	4669/7
4691	4693/13	4697/7	4699/37
4721	4723	4727/29	4729
4751	4753/7	4757/67	4759
4781/7	4783	4787	4789
4493	4499/11	4501/7	4507
4523	4529/7	4531/23	4537/13
4553/29	4559/47	4561	4567
4583	4589/13	4591	4597
4613/7	4619/31	4621	4627/7
4643	4649	4651	4657
4673	4679	4681/31	4687/43
4703	4709/17	4711/7	4717/53
4733	4739/7	4741/11	4747/47
4763/11	4769/19	4771/13	4777/17
4811/17	4813	4817	4819/61
4841/47	4843/29	4847/37	4849/13
4871	4873/11	4877	4879/7
4901/13	4903	4907/7	4909
4931	4933	4937	4939/11
4961/11	4963/7	4967	4969
4991/7	4993	4997/19	4999
5021	5023	5027/11	5029/47
5051	5053/31	5057/13	5059
5081	5083/13	5087	5089/7
4793	4799	4801	4807/11
4823/7	4829/11	4831	4837/7
4853/23	4859/43	4861	4867/31
4883/19	4889	4891/67	4897/59
4913/17	4919	4921/7	4927/13
4943	4949/7	4951	4957
4973	4979/13	4981/17	4987
5003	5009	5011	5017/29
5033/7	5039	5041/71	5047/7

5063/61	5069/37	5071/11	5077
5111/19	5113	5117/7	5119
5141/53	5143/37	5147	5149/19
5171	5173/7	5177/31	5179
5201/7	5203/11	5207/41	5209
5231	5233	5237	5239/13
5261	5263/19	5267/23	5269/11
5291/11	5293/67	5297	5299/7
5321/17	5323	5327/7	5329/73
5351	5353/53	5357/11	5359/23
5381	5383/7	5387	5389/17
5093/11	5099	5101	5107
5123/47	5129/23	5131/7	5137/11
5153	5159/7	5161/13	5167
5183/71	5189	5191/29	5197
5213/13	5219/17	5221/23	5227
5243/7	5249/29	5251/59	5257/7
5273	5279	5281	5287/17
5303	5309	5311/47	5317/13
5333	5339/19	5341/7	5347
5363/31	5369/7	5371/41	5377/19
5411/7	5413	5417	5419
5441	5443	5447/13	5449
5471	5473/13	5477	5479
5501	5503	5507	5509/7
5531	5533/11	5537/7	5539/29
5561/67	5563	5567/19	5569
5591	5593/7	5597/29	5599/11
5621/7	5623	5627/17	5629/13
5651	5653	5657	5659
5681/13	5683	5687/11	5689
5393	5399	5401/11	5407
5423/11	5429/61	5431	5437
5453/7	5459/53	5461/43	5467/7
5483	5489/11	5491/17	5497/23
5513/37	5519	5521	5527
5543/23	5549/31	5551/7	5557
5573	5579/7	5581	5587/37
5603/13	5609/71	5611/31	5617/41
5633/43	5639	5641	5647
5663/7	5669	5671/53	5677/7
5711	5713/29	5717	5719/7
5741	5743	5747/7	5749
5771/29	5773/23	5777/53	5779
5801	5803/7	5807	5809/37

5831/7	5833/19	5837/13	5839
5861	5863/11	5867	5869
5891/43	5893/71	5897	5899/17
5921/31	5923	5927	5929/7
5951/11	5953	5957/7	5959/59
5981	5983/31	5987	5989/53
5693	5699/41	5701	5707/13
5723/59	5729/17	5731/11	5737
5753/11	5759/13	5761/7	5767/73
5783	5789/7	5791	5797/11
5813	5819/11	5821	5827
5843	5849	5851	5857
5873/7	5879	5881	5887/7
5903	5909/19	5911/23	5917/61
5933/17	5939	5941/13	5947/19
5963/67	5969/47	5971/7	5977/43
6011	6013/7	6017/11	6019/13
6041/7	6043	6047	6049/23
6071/13	6073	6077/59	6079
6101	6103/17	6107/31	6109/41
6131	6133	6137/17	6139/7
6161/61	6163	6167/7	6169/31
6191/41	6193/11	6197	6199
6221	6223/7	6227/11	6229
6251/7	6253/13	6257	6259/11
6281/11	6283/61	6287	6289/19
5993/13	5999/7	6001/17	6007
6023/19	6029	6031/37	6037
6053	6059/73	6061/11	6067
6083/7	6089	6091	6097/7
6113	6119/29	6121	6127/11
6143	6149/11	6151	6157/47
6173	6179/37	6181/7	6187/23
6203	6209/7	6211	6217
6233/23	6239/17	6241/79	6247
6263	6269	6271	6277
6311	6313/59	6317	6319/71
6341/17	6343	6347/11	6349/7
6371/23	6373	6377/7	6379
6401/37	6403/19	6407/43	6409/13
6431/59	6433/7	6437/41	6439/47
6461/7	6463/23	6467/29	6469
6491	6493/43	6497/73	6499/67
6521	6523/11	6527/61	6529
6551	6553	6557/79	6559/7

6581	6583/29	6587/7	6589/11	7013	7019	7021/7	7027
6293/7	6299	6301	6307/7	7043	7049/7	7051/11	7057
6323	6329	6331/13	6337	7073/11	7079	7081/73	7087/19
6353	6359	6361	6367	7103	7109	7111/13	7117/11
6383/13	6389	6391/7	6397	7133/7	7139/11	7141/37	7147/7
6413/11	6419/7	6421	6427	7163/13	7169/67	7171/71	7177
6443/17	6449	6451	6457/11	7211	7213	7217/7	7219
6473	6479/11	6481	6487/13	7241/13	7243	7247	7249/11
6503/7	6509/23	6511/17	6517/7	7271/11	7273/7	7277/19	7279/29
6533/47	6539/13	6541/11	6547	7301/7	7303/67	7307	7309
6563	6569	6571	6577	7331	7333	7337/11	7339/41
6611/11	6613/17	6617/13	6619	7361/17	7363/37	7367/53	7369
6641/29	6643/7	6647/17	6649/61	7391/19	7393	7397/13	7399/7
6671/7	6673	6677/11	6679	7421/41	7423/13	7427/7	7429/17
6701	6703	6707/19	6709	7451	7453/29	7457	7459
6731/53	6733	6737	6739/23	7481	7483/7	7487	7489
6761	6763	6767/67	6769/7	7193	7199/23	7201/19	7207
6791	6793	6797/7	6799/13	7223/31	7229	7231/7	7237
6821/19	6823	6827	6829	7253	7259/7	7261/53	7267/13
6851/13	6853/7	6857	6859/19	7283	7289/37	7291/23	7297
6881/7	6883	6887/71	6889/83	7313/71	7319/13	7321	7327/17
6593/19	6599	6601/7	6607	7343/7	7349	7351	7357/7
6623/37	6629/7	6631/19	6637	7373/73	7379/47	7381/11	7387/83
6653	6659	6661	6667/59	7403/11	7409/31	7411	7417
6683/41	6689	6691	6697/37	7433	7439/43	7441	7447/11
6713/7	6719	6721/11	6727/7	7463/17	7469/7	7471/31	7477
6743/11	6749/17	6751/43	6757/29	7511/7	7513/11	7517	7519/73
6773/13	6779	6781	6787/11	7541	7543/19	7547	7549
6803	6809/11	6811/7	6817/17	7571/67	7573	7577	7579/11
6833	6839/7	6841	6847/41	7601/11	7603	7607	7609/7
6863	6869	6871	6877/13	7631/13	7633/17	7637/7	7639
6911	6913/31	6917	6919/11	7661/47	7663/79	7667/11	7669
6941/11	6943/53	6947	6949	7691	7693/7	7697/43	7699
6971	6973/19	6977	6979/7	7721/7	7723	7727	7729/59
7001	7003/47	7007/7	7009/43	7751/23	7753	7757	7759
7031/79	7033/13	7037/31	7039	7781/31	7783/43	7787/13	7789
7061/23	7063/7	7067/37	7069	7493/59	7499	7501/13	7507
7091/7	7093/41	7097/47	7099/31	7523	7529	7531/17	7537
7121	7123/17	7127	7129	7553/7	7559	7561	7567/7
7151	7153/23	7157/17	7159	7583	7589	7591	7597/71
7181/43	7183/11	7187	7189/7	7613/23	7619/19	7621	7627/29
6893/61	6899	6901/67	6907	7643	7649	7651/7	7657/13
6923/7	6929/13	6931/29	6937/7	7673	7679/7	7681	7687
6953/17	6959	6961	6967	7703	7709/13	7711/11	7717
6983	6989/29	6991	6997	7733/11	7739/71	7741	7747/61

7763/7	7769/17	7771/19	7777/7
7811/73	7813/13	7817	7819/7
7841	7843/11	7847/7	7849/47
7871/17	7873	7877	7879
7901	7903/7	7907	7909/11
7931/7	7933	7937	7939/17
7961/19	7963	7967/31	7969/13
7991/61	7993	7997/11	7999/19
8021/13	8023/71	8027/23	8029/7
8051/83	8053	8057/7	8059
8081	8083/59	8087	8089
7793	7799/11	7801/29	7807/37
7823	7829	7831/41	7837/17
7853	7859/29	7861/7	7867
7883	7889/7	7891/13	7897/53
7913/41	7919	7921/89	7927
7943/13	7949	7951	7957/73
7973/7	7979/79	7981/23	7987/7
8003/53	8009	8011	8017
8033/29	8039	8041/11	8047/13
8063/11	8069	8071/7	8077/41
8111	8113/7	8117	8119/23
8141/7	8143/17	8147	8149/29
8171	8173/11	8177/13	8179
8201/59	8203/13	8207/29	8209
8231	8233	8237	8239/7
8261/11	8263	8267/7	8269
8291	8293	8297	8299/43
8321/53	8323/7	8327/11	8329
8351/7	8353	8357/61	8359/13
8381/17	8383/83	8387	8389
8093	8099/7	8101	8107/11
8123	8129/11	8131/47	8137/79
8153/31	8159/41	8161	8167
8183/7	8189/19	8191	8197/7
8213/43	8219	8221	8227/19
8243	8249/73	8251/37	8257/23
8273	8279/17	8281/7	8287
8303/19	8309/7	8311	8317
8333/13	8339/31	8341/19	8347/17
8363	8369	8371/11	8377
8411/13	8413/47	8417/19	8419
8441/23	8443	8447	8449/7
8471/43	8473/37	8477/7	8479/61
8501	8503/11	8507/47	8509/67

8531/19	8533/7	8537	8539
8561/7	8563	8567/13	8569/11
8591/11	8593/13	8597	8599
8621/37	8623	8627	8629
8651/41	8653/17	8657/11	8659/7
8681	8683/19	8687/7	8689
8393/7	8399/37	8401/31	8407/7
8423	8429	8431	8437/11
8453/79	8459/11	8461	8467
8483/17	8489/13	8491/7	8497/29
8513	8519/7	8521	8527
8543	8549/83	8551/17	8557/43
8573	8579/23	8581	8587/31
8603/7	8609	8611/79	8617/7
8633/89	8639/53	8641	8647
8663	8669	8671/13	8677
8711/31	8713	8717/23	8719
8741	8743/7	8747	8749/13
8771/7	8773/31	8777/67	8779
8801/13	8803	8807	8809/23
8831	8833/11	8837	8839
8861	8863	8867	8869/7
8891/17	8893	8897/7	8899/11
8921/11	8923	8927/79	8929
8951	8953/7	8957/13	8959/17
8981/7	8983/13	8987/11	8989/89
8693	8699	8701/7	8707
8723/11	8729/7	8731	8737
8753	8759/19	8761	8767/11
8783	8789/11	8791/59	8797/19
8813/7	8819	8821	8827/7
8843/37	8849	8851/53	8857/17
8873/19	8879/13	8881/83	8887
8903/29	8909/59	8911/7	8917/37
8933	8939/7	8941	8947/23
8963	8969	8971	8977/47
9011	9013	9017/71	9019/29
9041	9043	9047/83	9049
9071/47	9073/43	9077/29	9079/7
9101/19	9103	9107/7	9109
9131/23	9133	9137	9139/13
9161	9163/7	9167/89	9169/53
9191/7	9193/29	9197/17	9199
9221	9223/23	9227	9229/11
9251/11	9253/19	9257	9259/47

9281	9283	9287/37	9289/7
8993/17	8999	9001	9007
9023/7	9029	9031/11	9037/7
9053/11	9059	9061/13	9067
9083/31	9089/61	9091	9097/11
9113/13	9119/11	9121/7	9127
9143/41	9149/7	9151	9157
9173	9179/67	9181	9187
9203	9209	9211/61	9217/13
9233/7	9239	9241	9247/7
9263/59	9269/13	9271/73	9277
9311	9313/67	9317/7	9319
9341	9343	9347/13	9349
9371	9373/7	9377	9379/83
9401/7	9403	9407/23	9409/97
9431	9433	9437	9439
9461	9463	9467	9469/17
9491	9493/11	9497	9499/7
9521	9523/89	9527/7	9529/13
9551	9553/41	9557/19	9559/11
9581/11	9583/7	9587	9589/43
9293	9299/17	9301/71	9307/41
9323	9329/19	9331/7	9337
9353/47	9359/7	9361/11	9367/17
9383/11	9389/41	9391	9397
9413	9419	9421	9427/11
9443/7	9449/11	9451/13	9457/7
9473	9479	9481/19	9487/53
9503/13	9509/37	9511	9517/31
9533	9539	9541/7	9547
9563/73	9569/7	9571/17	9577/61
9593/53	9599/29	9601	9607/13
9623	9629	9631	9637/23
9653/7	9659/13	9661	9667/7
9683/23	9689	9691/11	9697
9713/11	9719	9721	9727/71
9743	9749	9751/7	9757/11
9773/29	9779/7	9781	9787
9803	9809/17	9811	9817
9833	9839	9841/13	9847/43
9863/7	9869/71	9871	9877/7
9893/13	9899/19	9901	9907
9923	9929	9931	9937/19
9953/37	9959/23	9961/7	9967
9983/67	9989/7	9991/97	9997/13

9611/7	9613	9617/59	9619
9641/31	9643	9647/11	9649
9671/19	9673/17	9677	9679
9701/89	9703/31	9707/17	9709/7
9731/37	9733	9737/7	9739
9761/43	9763/13	9767	9769
9791	9793/7	9797/97	9799/41
9821/7	9823/11	9827/31	9829
9851	9853/59	9857	9859
9881/41	9883	9887	9889/11
9911/11	9913/23	9917/47	9919/7
9941	9943/61	9947/7	9949
9971/13	9973	9977/11	9979/17
10001/73	10003/7	10007	10009

There are all prime numbers from prime number 11 to number 10,009 in numerical order.

Numbers divisible with the same trailing number are distant from each other of number divisible by 30 or multiple of 30.

Examples: 2057 divisible by 11 plus 660 equals 2.717 divisible by 11.

2923 divisible by 37 plus 1110 equals 4033 divisible by 37, 4117 divisible by 23 plus 1380 equals 5497 divisible by 23.

You continue reading and find other prime numbers

To facilitate calculations to find divisible numbers with trailing number 1,3,7,9 instead of starting from the square of a prime number and then adding twice the prime number you can calculate the divisible numbers with final number 1,3,7,9 multiplying the prime number of which you are looking for numbers divisible with other subsequent numbers with final number 1,3,7,9 and then add prime number to 10 one or more times to get the divisible number by the prime number being examined.

Already written you know the numbers divisible up to the number 10.003. We start from these divisible numbers with final number 1,3,7,9 and the prime amount is added by 10.

I give you a list of numbers divisible from the prime number 7 to the number first 113 with final number 1, 3, 7, 9.

To these numbers add prime number by 10 and you find all divisible.

7 – 9821 10.003 9737 9709
11 – 9911 9823 9647 9889
13 – 9971 9763 9997 9659 1
7 – 9571 9673 9707 9979
19 – 9671 8873 9937 9899
23 – 9131 9683 9637 9959
29 – 7801 8903 9077 9019
31 – 9641 9083 9827 7409
37 – 9731 9953 9287 6179

41 – 9881 9553 9307 9389
43 – 9761 9073 9847 9589
47 - 9071 9353 9917 9259
53 – 8851 9593 9487 9169
59 – 8791 9263 9617 8909
61 – 9211 9943 9577 9089
67 – 7571 9983 8777 8509
71 – 9301 7313 9727 9869
73 – 10.001 7373 7957 7519
79 – 6241 7663 8137 7979
83 – 5561 5893 6557 6889
89 – 7921 8633 7387 6319
97 – 8051 8633 6887 9409
101 – 10201 10403 10307 11009
103 – 11021 13493 11227 10609
107 – 12091 11663 14017 11449
109 – 11881 13843 12317 14279
113 – 14351 14803 15707 12769

You keep adding the distance 30 to the last row of the ends with the numbers from 10,001, 10,003, 10,007, 10,009.

Find divisible numbers – the others are all prime numbers

10.031	10.033	10.037	10.039
10.061	10.063	10.067	10.069
10.091	10.093	10.097	10.099
10.121	10.123	10.127	10.129
10.151	10.153	10.157	10.159
10.181	10.183	10.187	10.189
10.211	10.213	10.217	10.219
10.241	10.243	10.247	10.249
10.271	10.273	10.277	10.279
10.301	10.303	10.307	10.309
10.331	10.333	10.337	10.339
10.361	10.363	10.367	10.369
10.391	10.393	10.397	10.399
10.421	10.423	10.427	10.429
10.451	10.453	10.457	10.459
10.481	10.483	10.487	10.489
10.511	10.513	10.517	10.519
10.541	10.543	10.547	10.549
10.571	10.573	10.577	10.579
10.601	10.603	10.607	10.609
10.631	10.633	10.637	10.639
10.661	10.663	10.667	10.669
19.691	10.693	10.697	10.699
10.721	10.723	10.727	10.729
10.751	10.753	10.757	10.759
10.781	10.783	10.787	10.789
10.811	10.813	10.817	10.819
10.841	10.843	10.847	10.849
10.871	10.873	10.877	10.879
10.901	10.903	10.907	10.909

The ending with the numbers 9983, 9989, 9991, 9997 is always adds 30 and you will find the numbers from 10.013, 10.019, 10.021 and 10.027 onwards.

You find the divisible numbers, those that remain are prime numbers.

10.013	10.019	10.021	10.027
10.043	10.049	10.051	10.057
10.073	10.079	10.081	10.087
10.103	10.109	10.111	10.117
10.133	10.139	10.141	10.147
10.163	10.169	10.171	10.177
10.193	10.199	10.201	10.207
10.223	10.229	10.231	10.237
10.253	10.259	10.261	10.267
10.283	10.289	10.291	10.297
10.313	10.319	10.321	10.327
10.343	10.349	10.351	10.357
10.373	10.379	10.381	10.387
10.403	10409	10.411	10.417
10.433	10439	10.441	10.447
10.463	10.469	10.471	10.477
10.493	10.499	10.501	10.507
10.523	10.529	10.531	10.537
10.553	10.559	10.561	10.567
10.583	10.589	10.591	10.597
10.613	10.619	10.621	10.627
10.643	10.649	10.651	10.657
10.673	10.679	10.681	10.687
10.703	10.709	10.711	10.717
10.733	10.739	10.741	10.747
10.763	10.769	10.771	10.777
10.793	10.799	10.801	10.807
10.823	10.829	10.831	10.837
10.853	10.859	10.861	10.867
10.883	10.889	10.891	10.897
10.913	10.919	10.921	10.927

NOTE 1 – To find the number divisible by 11 after 2.057
I add to 2.057 the distance 11x10 = 110 and I find 2.057+110=2.167 which does not appear in the list of numbers.
I still have to add the distance 11 x 10=110 twice to 2.167 and I find 2.167+220=2387

NOTE 2 – To find for example the numbers divisible by 7 childbirth from the last number divisible by 7 which is 9821 and I add the distance 7x10=70 until I find a number that appears in the list of numbers. 9821+70=9891 9891+70=9961 9961+70=10.031 appearing in the list of numbers.
The same for all other numbers.