MJN Prime numbers-Algorithm (Multiples of 10-Fold of Prime numbers)

It is well known that you do not have to try with prime numbers greater than the square root (Vn) of the number one examines.

Tal	Explanation to MJN Prime numbers-Algorithm	<mark>Is it Prime?</mark>
91	3: The sum of its digits is not divisible by 3. 7: 91 - 70 = 21, that is divisible by 7.	No
73	3: The sum of its digits is not divisible by 3. 7: 73 - 70 = 3, this is not divisible by 7.	Yes
97	3: The sum of its digits is not divisible by 3. 7: 97 - 70 = 27, this is not divisible by 7.	Yes
119	3: The sum of its digits is not divisible by 3. 7: 119 - 70 = 49, that is divisible by 7. or (119 - 140 = 21), that is divisible by 7.	No
101	 3: The sum of its digits is not divisible by 3. 7: 101 - 70 = 31, that is not divisible by 7. 	Yes
133	 3: The sum of its digits is not divisible by 3. 7: 133 - 70 = 63, that is divisible by 7 or (133 - 140 = -7) that is divisible by 7 	No
127	 3: The sum of its digits is not divisible by 3. 7: 127 - 70 = 57, that is not divisible by 7. or (127 - 140 = -13), that is not divisible by 7. 11: 127 - 110 = 17, that is not divisible by 11. 	Yes
121	3: The sum of its digits is not divisible by 3. 7: 121 - 70 = 51, that is not divisible by 7. 11: 121 - 110 = 11, that is divisible by 11.	No
143	 3: The sum of its digits is not divisible by 3. 7: 143 - 70 = 73, that is not divisible by 7. or (143 - 140 = 3), that is not divisible by 7. 11: 143 - 110 = 33, that is divisible by 11. 	No
137	3: The sum of its digits is not divisible by 3. 7: 137 - 70 = 67, that is not divisible by 7. or (137 - 140 = -3) , that is not divisible by 7. 11: 137 - 110 = 27, that is not divisible by 11.	Yes
169	 3: The sum of its digits is not divisible by 3. 7: 169 - 70 = 99, that is not divisible by 7. 11: 169 - 110 = 59, that is not divisible by 11. 	No

	13: 169 - 130 = 39, that is divisible by 13.	
151	 3: The sum of its digits is not divisible by 3. 7: 151 - 140 = 11, that is not divisible by 7. 11: 151 - 110 = 41, that is not divisible by 11. 	Yes
203	 3: The sum of its digits is not divisible by 3. 7: 203 - 140 = 63, that is divisible by 7. or (203 - 210 = -7), that is divisible by 7. 	No
187	 3: The sum of its digits is not divisible by 3. 7: 187 - 140 = 47, that is not divisible by 7. 11: 187 - 110 = 77, that is divisible by 11. 	No
181	 3: The sum of its digits is not divisible by 3. 7: 181 - 140 = 41, that is not divisible by 7. 11: 181 - 110 = 71, that is not divisible by 11. 13: 181 - 130 = 51, that is not divisible by 13. 	Yes
253	 3: The sum of its digits is not divisible by 3. 7: 253 - 210 = 43, that is not divisible by 7. 11: 253 - 220 = 33, that is divisible by 11. 	No
197	 3: The sum of its digits is not divisible by 3. 7: 197 - 140 = 57, that is not divisible by 7. or (197 - 210 = -13), that is not divisible by 7. 11: 197 - 110 = 87, that is not divisible by 11. or (197 - 220 = -23), that is not divisible by 11. 13: 197 - 130 = 67, that is not divisible by 13. 	Yes
209	 3: The sum of its digits is not divisible by 3. 7: 209 - 140 = 69, that is not divisible by 7. 11: 209 - 110 = 99, that is divisible by 11. or (209 - 220 = -11), that is divisible by 11. 	No
221	 3: The sum of its digits is not divisible by 3. 7: 221 - 210 = 11, that is not divisible by 7. 11: 221 - 220 = 1, that is not divisible by 11. 13: 221 - 130 = 91, that is divisible by 13. or (221 - 260 = -39), that is divisible by 13. 	No
323	 3: The sum of its digits is not divisible by 3. 7: 323 - 280 = 43, that is not divisible by 7. or (323 - 350 = -27), that is not divisible by 7. 11: 323 - 220 = 103, that is not divisible by 11. 	No

	or (323 - 330 = -7, that is not divisible by 11). 13: 323 - 260 = 63, that is not divisible by 13. or (323 - 390 = -67), that is not divisible by 13. 17: 340 - 323 = 17, that is divisible by 17. or (323 - 340 = -17, that is divisible by 17).	
227	 3: The sum of its digits is not divisible by 3. 7: 227 - 210 = 17, that is not divisible by 7. 11: 227 - 220 = 7, that is not divisible by 11. 13: 227 - 130 = 97, that is not divisible by 13. (130 - 97 = 33, which is not divisible by 13). 	Yes
301	 3: The sum of its digits is not divisible by 3. 7: 301 - 280 = 21, that is divisible by 7. or (301 - 350 = -49), that is divisible by 7. 	No
343	 3: The sum of its digits is not divisible by 3. 7: 301 - 280 = 21, that is divisible by 7. or (343 - 350 = -7), that is divisible by 7. 	No
247	 3: The sum of its digits is not divisible by 3. 7: 247 - 210 = 37, that is not divisible by 7. 11: 247 - 220 = 27, that is not divisible by 11. 13: 260 - 247 = 13, that is divisible by 13. or (247 - 260 = -13, that is divisible by 13). 	No
289	 3: The sum of its digits is not divisible by 3. 7: 289 - 280 = 9, that is not divisible by 7. 11: 289 - 220 = 69, that is not divisible by 11. 13: 289 - 260 = 29, that is not divisible by 13. 17: 289 - 340 = -51, that is divisible by 17. 	No
311	 3: The sum of its digits is not divisible by 3. 7: 311 - 280 = 31, that is not divisible by 7. 11: 330 - 311 = 19, that is not divisible by 11. or (311 - 330 = -19, that is not divisible by 11). 13: 311 - 260 = 51, that is not divisible by 13. 17: 340 - 311 = 29, that is not divisible by 17. (311 - 340 = -29, that is not divisible by 17). 	Yes
403	 3: The sum of its digits is not divisible by 3. 7: 403 - 350 = 53, that is not divisible by 7. 11: 440 - 403 = 37, that is not divisible by 11. 	No

	or (403 - 440 = -37, that is not divisible by 11). 13: 403 - 390 = 13, that is divisible by 13.	
287	3: The sum of its digits is not divisible by 3.7: 287 - 280 = 7, that is divisible by 7.	No
349	 3: The sum of its digits is not divisible by 3. 7: 350 - 349 = 1, that is not divisible by 7. 11: 349 - 330 = 19, that is not divisible by 11. 13: 390 - 349 = 41, that is not divisible by 13. 17: 349 - 340 = 9, that is not divisible by 17. 	Yes
341	 3: The sum of its digits is not divisible by 3. 7: 350 - 341 = 9, that is not divisible by 7. 11: 341 - 330 = 11, that is divisible by 11. 	No
413	 3: The sum of its digits is not divisible by 3. 7: 413 - 350 = 63, that is divisible by 7. or (413 - 430 = 7, that is divisible by 7) 	No
377	 3: The sum of its digits is not divisible by 7. 3: 377 - 350 = 27, that is not divisible by 7. 11: 377- 330 = 47, that is not divisible by 11. 13: 377 - 390 = -13, that is divisible by 13. 	No
399	3: The sum of its digits is not divisible by 3.	No
361	 3: The sum of its digits is not divisible by 3. 7: 361 - 350 = 11, that is not divisible by 7. 11: 361 - 330 = 31, that is not divisible by 11. 13: 361 - 390 = -29, that is not divisible by 13. 17: 361 - 340 = 21, that is not divisible by 17. 19: 361 - 380 = -19, that is divisible by 19. 	No
433	 3: The sum of its digits is not divisible by 3. 7: 433 - 420 = 13, that is not divisible by 7. 11: 433 - 440 = -7, that is not divisible by 11. 13: 433 - 390 = 43, that is not divisible by 13. 17: 433 - 340 = 93, that is not divisible by 17. or (433 - 510 = -77, that is not divisible by 17). 	Yes
407	 3: The sum of its digits is not divisible by 3. 7: 407 - 350 = 57, that is not divisible by 7. 11: 440 - 407 = 33, that is divisible by 11. 	No
429	3: The sum of its digits is divisible by 3.	No
391	 3: The sum of its digits is not divisible by 3. 7: 391 - 350 = 41, that is not divisible by 7. 11: 391 - 330 = 61, that is not divisible by 11. 	No

	13: 391 - 390 = 1, that is not divisible by 13. 17: 391 - 340 = 51, that is divisible by 17.	
443	 3: The sum of its digits is not divisible by 3. 7: 443 - 420 = 23, that is not divisible by 7. 11: 443 - 440 = 3, that is not divisible by 11. 13: 443 - 390 = 53, that is not divisible by 13. 17: 443 - 340 = 103, that is not divisible by 17. or (443 - 510 = -67, that is not divisible by 17). 19: 443 - 380 = 63, that is not divisible by 19. 	Yes
427	3: The sum of its digits is not divisible by 3.7: 427 - 420 = 7, that is divisible by 7.	No
439	 3: The sum of its digits is not divisible by 3. 7: 439 - 420 = 19, that is not divisible by 7. 11: 440 - 439 = 1, that is not divisible by 11. 13: 439 - 390 = 49, that is not divisible by 13. 17: 439 - 340 = 99, that is not divisible by 17. 19: 439 - 380 = 59, that is not divisible by 19. 	Yes
451	 3: The sum of its digits is not divisible by 3. 7: 451 - 420 = 31, that is not divisible by 7. 11: 451 - 440 = 11, that is divisible by 11. 	No
473	 3: The sum of its digits is not divisible by 3. 7: 473 - 420 = 53, that is not divisible by 7. 11: 473 - 440 = 33, that is divisible by 11. 	No
437	 3: The sum of its digits is not divisible by 3. 7: 437 - 420 = 17, that is not divisible by 7. 11: 440 - 437 = 3, that is not divisible by 11. 13: 437 - 390 = 47, that is not divisible by 13. 17: 437 - 340 = 97, that is not divisible by 17. 19: 437 - 380 = 57, that is divisible by 19. 	No
479	 3: The sum of its digits is not divisible by 3. 7: 479 - 420 = 59, that is not divisible by 7. 11: 479 - 440 = 39, that is not divisible by 11. 13: 479 - 390 = 89, that is not divisible by 13. or (479 - 520 = -41, that is not divisible by 13). 17: 479 - 510 = 31, that is not divisible by 17. 19: 479 - 570 = -91, that is not divisible by 19. 	Yes
481	 3: The sum of its digits is not divisible by 3. 7: 481 - 420 = 61, that is not divisible by 7. 11: 481 - 440 = 41, that is not divisible by 11. 13: 481 - 390 = 91, that is divisible by 13. or 	No

	(481 - 520 = -39, that is divisible by 13).	
	3: The sum of its digits is not divisible by 3.	
	7: 493 - 420 = 73, that is not divisible by 7.	
	11: 493 - 440 = 53, that is not divisible by 11.	
493	13: 493 - 390 = 103, that is not divisible by 13.	No
	or	
	(493 - 520 = -27, that is not divisible by 13).	
	17: 493 - 510 = -17, that is divisible by 17.	
407	3: The sum of its digits is not divisible by 3.	No
497	7: 497 - 490 = 7, that is divisible by 7.	INO
489	3: The sum of its digits is divisible by 3.	No
	3: The sum of its digits is not divisible by 3.	
	7: 499 - 420 = 79, that is not divisible by 7.	
100	11: 499 - 440 = 59, that is not divisible by 11.	Voc
499	13: 499 - 520 = -21, that is not divisible by 13.	163
	17: 499 - 510 = -11, that is not divisible by 17.	
	19: 499 - 570 = -71, that is not divisible by 19.	

11			
	511	3: The sum of its digits is not divisible by 3.7: 511 - 490 = 21, that is divisible by 7.	No
	533	 3: The sum of its digits is not divisible by 3. 7: 533 - 490 = 43, that is not divisible by 7. 11: 550 - 533 = 17, that is not divisible by 11. 13: 533 - 520 = 13, that is divisible by 13. or (520 - 533 = -13, that is divisible by 13). 	No
	527	 3: The sum of its digits is not divisible by 3. 7: 527 - 490 = 73, that is not divisible by 7. 11: 550 - 527 = 23, that is not divisible by 11. 13: 527 - 520 = 7, that is not divisible by 13. 17: 527 - 510 = 17, that is divisible by 17. 	No
	529	 3: The sum of its digits is not divisible by 3. 7: 560 - 529 = 31, that is not divisible by 7. 11: 550 - 529 = 21, that is not divisible by 11. 13: 529 - 520 = 9, that is not divisible by 13. 17: 529 - 510 = 19, that is not divisible by 17. 19: 570 - 529 = 41, that is divisible by 19. 23: 529 - 460 = 69, that is divisible by 23. 	No
	551	 3: The sum of its digits is not divisible by 3. 7: 560 - 551 = 9, that is not divisible by 7. 11: 551 - 550 = 1, that is not divisible by 11. 13: 551 - 520 = 31, that is not divisible by 13. 17: 551 - 510 = 41, that is not divisible by 17. 19: 570- 551 = 19, that is divisible by 19. 	No
	563	 3: The sum of its digits is not divisible by 3. 7: 563 - 560 = 3, that is not divisible by 7. 11: 563 - 550 = 13, that is not divisible by 11. 13: 563 - 520 = 43, that is not divisible by 13. 17: 563 - 510 = 53, that is not divisible by 17. 19: 570 - 563 = 7, that is not divisible by 19. 23: 563 - 460 = 103, that is not divisible by 23 or 563 - 575 = -12, that is not divisible by 23. 	Yes
	597	3: The sum of its digits is divisible by 3.	No
	599	 3: The sum of its digits is not divisible by 3. 7: 599 - 560 = 39, that is not divisible by 7. 11: 599 - 550 = 49, that is not divisible by 11. 13: 599 - 520 = 79, that is not divisible by 13. 17: 599 - 510 = 89, that is not divisible by 17. 19: 599 - 570 = 29, that is not divisible by 19. 	Yes

	23: 690 - 599 = 91, that is divisible by 23 or	
	599 - 575 = 24, that is not divisible by 23	
611	 3: The sum of its digits is not divisible by 3. 7: 630 - 611 = 19, that is not divisible by 7. 11: 660 - 611 = 49, that is not divisible by 11. 13: 611 - 650 = 39, that is divisible by 13. 	No
623	 3: The sum of its digits is not divisible by 3. 7: 630 - 623 = 7, that is divisible by 7. 	No
667	 3: The sum of its digits is not divisible by 3. 7: 667 - 630 = 47, that is not divisible by 7. 11: 667 - 660 = 7, that is not divisible by 11. 13: 667 - 650 = 17, that is not divisible by 13. 17: 680 - 667 = 13, that is not divisible by 17. 19: 667 - 665 = 2, that is not divisible by 19. 23: 690 - 667 = 23, that is divisible by 23. 	No
671	 3: The sum of its digits is not divisible by 3. 7: 671 - 630 = 41, that is not divisible by 7. 11: 671 - 660 = 11, that is divisible by 11. 	No
703	 3: The sum of its digits is not divisible by 3. 7: 703 - 630 = 73, that is not divisible by 7. 11: 703 - 660 = 43, that is not divisible by 11. 13: 703 - 650 = 53, that is not divisible by 13. 17: 703 - 680 = 23, that is not divisible by 17. 19: 760 - 703 = 57, that is divisible by 19. 	No
709	 3: The sum of its digits is not divisible by 3. 7: 709 - 700 = 9, that is not divisible by 7. 11: 709 - 660 = 49, that is not divisible by 11. 13: 709 - 650 = 59, that is not divisible by 13. 17: 709 - 680 = 29, that is not divisible by 17. 19: 760 - 709 = 51, that is not divisible by 19. 23: 709 - 690 = 19, that is not divisible by 23. 	Yes
721	3: The sum of its digits is not divisible by 3.7: 721 - 700 = 21, that is divisible by 7.	No
737	 3: The sum of its digits is not divisible by 3. 7: 737 - 700 = 37, that is not divisible by 7. 11: 737 - 660 = 77, that is divisible by 11. 	No
779	 3: The sum of its digits is not divisible by 3. 7: 779 - 700 = 79, that is not divisible by 7. 11: 779 - 770 = 9, that is not divisible by 11. 13: 780 - 779 = 1, that is not divisible by 13. 17: 779 - 680 = 99, that is not divisible by 17. 19: 779 - 760 = 19, that is divisible by 19. 	No

733	 3: The sum of its digits is not divisible by 3. 7: 733 - 700 = 33, that is not divisible by 7. 11: 733 - 660 = 73, that is not divisible by 11. 13: 733 - 650 = 83, that is not divisible by 13. or (733 - 780 = -47), that is not divisible by 13. 17: 733 - 680 = 53, that is not divisible by 17. 19: 760 - 733 = 27, that is not divisible by 19. 23: 733 - 690 = 43, that is divisible by 23. 	Yes
781	 3: The sum of its digits is not divisible by 3. 7: 781 - 700 = 81, that is not divisible by 7. 11: 781 - 770 = 11, that is divisible by 11. 	No
757	 3: The sum of its digits is not divisible by 3. 7: 757 - 700 = 57, that is not divisible by 7. 11: 757 - 660 = 97, that is not divisible by 11. or (757 - 770 = -13), that is not divisible by 11. 13: 780 - 757 = 23, that is not divisible by 13. 17: 757 - 680 = 77, that is not divisible by 17. 19: 760 - 757 = 3, that is not divisible by 19. 23: 757 - 690 = 67, that is divisible by 23. 	Yes
713	 3: The sum of its digits is not divisible by 3. 7: 713 - 700 = 13, that is not divisible by 7. 11: 713 - 660 = 53, that is not divisible by 11. 13: 780 - 713 = 67, that is not divisible by 13. 17: 713 - 680 = 33, that is not divisible by 17. 19: 760 - 713 = 47, that is not divisible by 19. 23: 713 - 690 = 23, that is divisible by 23. 	No
799	 3: The sum of its digits is not divisible by 3. 7: 799 - 700 = 99, that is not divisible by 7. 11: 799 - 770 = 29, that is not divisible by 11. 13: 799 - 780 = 19, that is not divisible by 13. 17: 850 - 799 = 51, that is divisible by 17. 	No
791	 3: The sum of its digits is not divisible by 3. 7: 791 - 700 = 91, that is divisible by 7. or (791 - 770 = 21), that is divisible by 7. 	No
803	 3: The sum of its digits is not divisible by 3. 7: 803 - 770 = 33, that is not divisible by 7. 11: 803 - 770 = 33, that is divisible by 11. 	No
817	 3: The sum of its digits is divisible by 3. 7: 817 - 770 = 47, that is not divisible by 7. 11: 817 - 770 = 47, that is not divisible by 11. 	No

	13: 817 - 780 = 37, that is not divisible by 13. 17: 850 - 817 = 33, that is not divisible by 17. 19: 817 - 760 = 57, that is divisible by 19.	
821	 3: The sum of its digits is not divisible by 3. 7: 821 - 770 = 51, that is not divisible by 7. 11: 821 - 770 = 51, that is not divisible by 11. 13: 821 - 780 = 41, that is not divisible by 13. 17: 850 - 821 = 29, that is not divisible by 17. 19: 821 - 760 = 61, that is not divisible by 19. 23: 920 - 821 = 99, that is divisible by 23. 	Yes
841	 3: The sum of its digits is not divisible by 3. 7: 841 - 770 = 71, that is not divisible by 7. or (841 - 840 = -1), that is not divisible by 7. 11: 841 - 770 = 71, that is not divisible by 11. 13: 841 - 780 = 61, that is not divisible by 13. 17: 850 - 841 = 9, that is not divisible by 17. 19: 841 - 760 = 81, that is not divisible by 19. 23: 920 - 841 = 79, that is not divisible by 23. 29: 870 - 841 = 29, that is divisible by 29. 	No
901	 3: The sum of its digits is not divisible by 3. 7: 901 - 840 = 61, that is not divisible by 7. 11: 901 - 880 = 21, that is not divisible by 11. 13: 910 - 901 = 9, that is not divisible by 13. 17: 901- 850 = 51, that is divisible by 17. 	No
923	 3: The sum of its digits is not divisible by 3. 7: 923 - 910 = 13, that is not divisible by 7. 11: 923 - 880 = 43, that is not divisible by 11. 13: 923 - 910 = 13, that is divisible by 13. 	No
977	 3: The sum of its digits is not divisible by 3. 7: 977 - 910 = 67, that is not divisible by 7. 11: 990 - 977 = 13, that is not divisible by 11. 13: 977 - 910 = 67, that is not divisible by 13. 17: 977 - 850 = -127, that is not divisible by 17. or (170 - 127 = 43), that is not divisible by 17. or 977 - 1020 = -43, that is not divisible by 17. 19: 977 - 950 = 27, that is not divisible by 19. 23: 977 - 920 = 57, that is not divisible by 23. 29: 977 - 870 = 107, that is divisible by 29. Half of 290 minus 107 is 38 that is not divisible by 29. or (977 - 1016 = -39), that is not divisible by 29. 	Yes

	31: 977 - 930 = 47, that is not divisible by 31.	
891	3: The sum of its digits is divisible by 3.	No
973	 3: The sum of its digits is not divisible by 3. 7: 973 - 910 = 63, that is divisible by 7. 	No
987	3: The sum of its digits is divisible by 3.	No
979	 3: The sum of its digits is not divisible by 3. 7: 979 - 910 = 69, that is not divisible by 7. 11: 990 - 979 = 11, that is divisible by 11. 	No
991	 3: The sum of its digits is not divisible by 3. 7: 991 - 910 = 81, that is not divisible by 7. 11: 991 - 990 = 1, that is not divisible by 11. 13: 991 - 910 = 81, that is not divisible by 13. 17: 991 - 850 = 141, that is not divisible by 17. or (170 - 141 = 29), that is not divisible by 17. or (977 - 1020) = -43, that is not divisible by 17. 19: 991 - 950 = 41, that is not divisible by 19. 23: 991 - 920 = 71, that is not divisible by 23. 29: 991 - 870 = 121, that is divisible by 29. Half of 290 minus 121 is 24 that is not divisible by 29. or (977 - 1016 = -39), that is not divisible by 29. 31: 991 - 930 = 61, that is not divisible by 31. 	Yes
961	 3: The sum of its digits is not divisible by 3. 7: 961 - 910 = 51, that is not divisible by 7. 11: 990 - 961 = 29, that is not divisible by 11. 13: 961 - 910 = 51, that is not divisible by 13. 17: 961 - 850 = 111, that is not divisible by 17. 19: 961 - 950 = 11, that is not divisible by 19. 23: 961 - 920 = 41, that is not divisible by 23. 29: 961 - 870 = 91, that is not divisible by 29. Half of 290 minus 91 is 54 that is not divisible by 31. 	No
981	3: The sum of its digits is divisible by 3.	No
989	 3: The sum of its digits is not divisible by 3. 7: 989 - 910 = 79, that is not divisible by 7. 11: 990 - 989 = 1, that is not divisible by 11. 13: 989 - 910 = 79, that is not divisible by 13. 17: 989- 850 = 139, that is not divisible by 17. (170 - 139 = 31), that is not divisible by 17. or 989- 1020 = -31, that is not divisible by 17. 	No

	19: 989 - 950 = 39, that is not divisible by 19.	
	23: 989 - 920 = 69, that is divisible by 23.	
999	3: The sum of its digits is divisible by 3.	No