

A Prime Number Sieve

Prime numbers are special numbers that appear in no times table apart from their own.

Apply this algorithm to the table to find the primes.

1. Colour in all the numbers in the 2 times table in turn, apart from 2
2. Colour in all the numbers in the 3 times table in turn, apart from 3
3. Colour in all the numbers in the 4 times table in turn, apart from 4
4. Colour in all the numbers in the 5 times table in turn, apart from 5
5. Colour in all the numbers in the 6 times table in turn, apart from 6
6. Colour in all the numbers in the 7 times table in turn, apart from 7
7. Colour in all the numbers in the 8 times table in turn, apart from 8
8. Colour in all the numbers in the 9 times table in turn, apart from 9

The numbers left uncoloured are the prime numbers.

	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Are there any steps in the algorithm that didn't remove any new numbers?
Cross out those steps from the algorithm to make a faster algorithm.