

PICK A NUMBER*

Here is a way to bamboozle your friends with your powers of clairvoyance. Ask a volunteer to pick a number between 1 and 100, to write it on a sheet of paper (to keep him honest) and, of course, not to let you see it. Then show him the seven cards below in turn and, in each case, ask him to tell you whether his number appears on the card or not. Nothing more is needed. You will then instantly tell him the secret number. All you have to do is to add the numbers in the top left hand corners of the cards on which his number appeared. For example, suppose the number is 55. This appears on the cards whose top left hand corners are 1, 2, 4, 16 and 32 and, lo and behold, $55 = 1 + 2 + 4 + 16 + 32$.

1	3	5	7	9	11	13
15	17	19	21	23	25	27
29	31	33	35	37	39	41
43	45	47	49	51	53	55
57	59	61	63	65	67	69
71	73	75	77	79	81	83
85	87	89	91	93	95	97
99						

2	3	6	7	10	11	14
15	18	19	22	23	26	27
30	31	34	35	38	39	42
43	46	47	50	51	54	55
58	59	62	63	66	67	70
71	74	75	78	79	82	83
86	87	90	91	94	95	98
99						

4	5	6	7	12	13	14
15	20	21	22	23	28	29
30	31	36	37	38	39	44
45	46	47	52	53	54	55
60	61	62	63	68	69	70
71	76	77	78	79	84	85
86	87	92	93	94	95	100

8	9	10	11	12	13	14
15	24	25	26	27	28	29
30	31	40	41	42	43	44
45	46	47	56	57	58	59
60	61	62	63	72	73	74
75	76	77	78	79	88	89
90	91	92	93	94	95	

16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31	48	49	50	51	52
53	54	55	56	57	58	59
60	61	62	63	80	81	82
83	84	85	86	87	88	89
90	91	92	93	94	95	

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	96	97	98
99	100					

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					

* Parabola learnt of this trick from Professor George Andrews of Pennsylvania State University, who is at present a Visiting Professor at the University of New South Wales.