



## Problem of the Week

### Grade 7 and 8

#### This is Some Sum

1	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

In the late 1700s, Gauss was asked to find the sum of the numbers from 1 to 100. Gauss quickly gave the answer 5 050. He did this by looking at patterns.

Instead of finding the sum of the numbers 1 to 100, can you find the sum of the **digits** of the numbers from 1 to 100?

For example, the sum of the digits of the numbers from 1 to 14 is

$$1 + 2 + 3 + 4 + 5 + 6 + 7 + 8 + 9 + (1 + 0) + (1 + 1) + (1 + 2) + (1 + 3) + (1 + 4) = 60.$$

