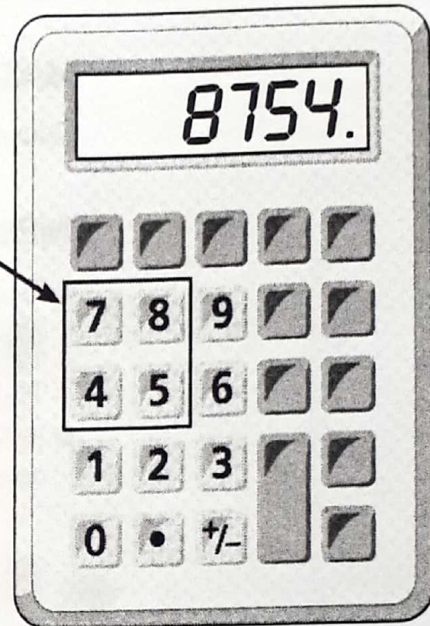




1 Number squares

- (a) Use this square of 4 number keys.
- Make the largest 4-digit number.
 - Make the smallest 4-digit number.
 - Find the difference.
- (b) Do this again for other squares of 4 number keys. What do you notice?

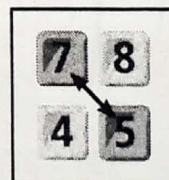


2 Corners

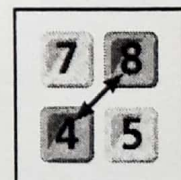
- (a) Use this square again.



Multiply the numbers in the opposite corners together.
Write both answers.



and

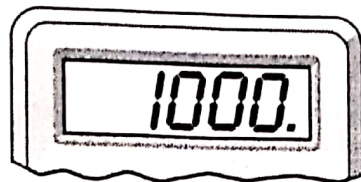


- (b) Do this again for other squares.
What do you notice?

- 3 Investigate your number squares for other patterns.
Write about what you find.



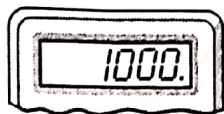
5 Target



Problem solving activity



1 Use these keys only to make



Use the **8** key
eight times.



2 Use these keys only
to make



3 Use these keys only
to make




4 Find other ways of doing questions 2 and 3.

Name _____

- 1 Find the row or column with the most numbers which divide exactly by 7 or by 8 or by 9.

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

- 2 Find a square of four numbers like this  on the grid so that
- the total of the four numbers is as large as possible, and
 - none of the numbers divides exactly by 7 or by 8 or by 9.