

# Patterns on the Number Line Hotel

NCTM Standards 1, 2, 7, 8, 9, 10

The numbers in the grid are arranged to match the Number Line Hotel. Shade the landing numbers and then find a rule.

- 1 Start at 0.

60	61	62	63	64	65	66	67	68	69
50	51	52	53	54	55	56	57	58	59
40	41	42	43	44	45	46	47	48	49
30	31	32	33	34	35	36	37	38	39
20	21	22	23	24	25	26	27	28	29
10	11	12	13	14	15	16	17	18	19
0	1	2	3	4	5	6	7	8	9

Find a rule.

- 2 Start at 99.

90	91	92	93	94	95	96	97	98	99
80	81	82	83	84	85	86	87	88	89
70	71	72	73	74	75	76	77	78	79
60	61	62	63	64	65	66	67	68	69
50	51	52	53	54	55	56	57	58	59
40	41	42	43	44	45	46	47	48	49
30	31	32	33	34	35	36	37	38	39

Find a rule.

The grids are like the Number Line Hotel.  
Describe the pattern of shaded squares with  
at least 2 different rules.

3

40	41	42	43	44	45	46	47	48	49
30	31	32	33	34	35	36	37	38	39
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10	11	12	13	14	15	16	17	18	19
0	1	2	3	4	5	6	7	8	9

1. \_\_\_\_\_

2. \_\_\_\_\_

4

60	61	62	63	64	65	66	67	68	69
50	51	52	53	54	55	56	57	58	59
40	41	42	43	44	45	46	47	48	49
30	31	32	33	34	35	36	37	38	39
20	21	22	23	24	25	26	27	28	29

1. \_\_\_\_\_

2. \_\_\_\_\_

**5 Challenge** Make your own pattern and write your rule.

20	21	22	23	24	25	26	27	28	29
10	11	12	13	14	15	16	17	18	19
0	1	2	3	4	5	6	7	8	9

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