Name _____ Date _____

Complete the pattern, and name the pattern rule.

Pattern Rules

A. 0, 7, 14, 21, _____ , _____ , _____ _____

B. 3, 8, 13, 18, _____ , _____ , _____ _____

C. 11, 22, 33, 44, _____ , _____ , _____ _____

D. 1, 2, 4, 5, 7, _____ , _____ , _____ _____

E. 89, 78, 67, 56, _____ , _____ , _____ _____

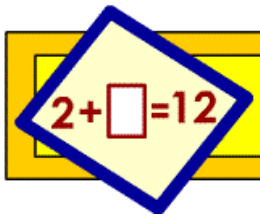
F. 24, 20, 22, 18, _____ , _____ , _____ _____

G. 0, 1, 1, 2, 3, 5, _____ , _____ , _____ _____

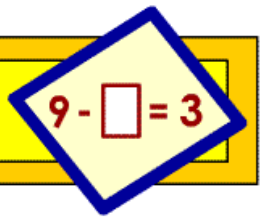
H. 1, 2, 4, 8, 16, _____ , _____ , _____ _____

I. 1, 4, 9, 16, 25, _____ , _____ , _____ _____

Name _____ Date _____



Numeric Patterns



Color the hundreds charts using each number pattern, and then answer the questions.

J. 10, 19, 28, 37

Continue the pattern. What is the last number colored on the chart?

_____

Think about the pattern rule used in this pattern. If the first number started with 9 and the same pattern rule was used, what numbers would be colored?

_____

_____

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	42	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

K. 3, 7, 11, 15, 19, 23, 27, 31, 35, 39

If this pattern continues, will the number 79 be colored? Explain your thinking.

_____

_____

_____

Complete the pattern. What are the last 3 numbers colored?

_____

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	42	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

Connections

Today I learned:

_____

_____

_____

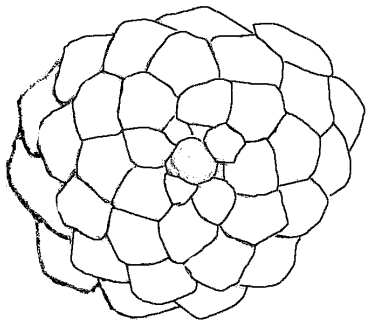
The Famous Fibonacci Sequence

During the 1200s, an Italian mathematician named Leonardo Pisa Fibonacci discovered one of the most famous numeric patterns. The Fibonacci pattern or sequence is made by adding the 2 previous numbers to create the next number. Continue the pattern 3 more steps.

(1 + 1) (1 + 2) (2 + 3) (3 + 5)

1, 1, 2, 3, 5, 8, 13, 21, 34, ____, ____, ____

The Fibonacci sequence is found throughout nature. Pinecones, sunflowers, and pineapples are just a few of nature's products that show the sequence. Find a pinecone and examine the way the scales spiral from its base. You will discover that the numbers of scales in the spirals are the numbers in the Fibonacci sequence. Try this on a sunflower or a pineapple.



Related Literature to Numeric Patterns

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