

NAME \_\_\_\_\_

DATE \_\_\_\_\_

PERIOD \_\_\_\_\_

# Patterns & Sequences

Write the next 5 terms of each of the following sequences then make them into a table:

1) 1, 4, 7, 10, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

Term	1	2	3	4	5	6	7	8	9
Value	1	4	7	10					

What is the pattern? \_\_\_\_\_

2) 1, 3, 6, 10, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

Term	1	2	3	4	5	6	7	8	9
Value									

What is the pattern? \_\_\_\_\_

3) 2, 5, 9, 14, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

Term	1	2	3	4	5	6	7	8	9
Value									

What is the pattern? \_\_\_\_\_

In sequences 4 through 7, fill in the terms and the values:

4) 2, 5, 10, 17, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

Term									
Value									

What is the pattern? \_\_\_\_\_

5) 10,000, 1,000, 100, 10, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

Term									
Value									

What is the pattern? \_\_\_\_\_

6) 1, 4, 9, 16, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

Term									
Value									

What is the pattern? \_\_\_\_\_

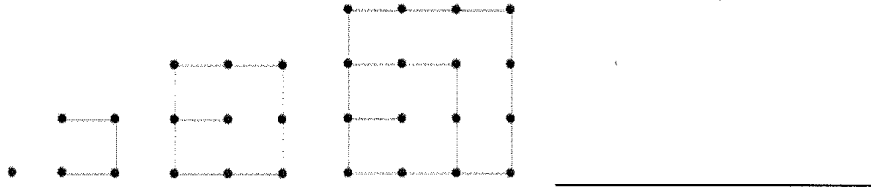
7) 1, 8, 27, 64, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

Term									
Value									

What is the pattern? \_\_\_\_\_

### THE SQUARE SEQUENCE

Extend this dot pattern:



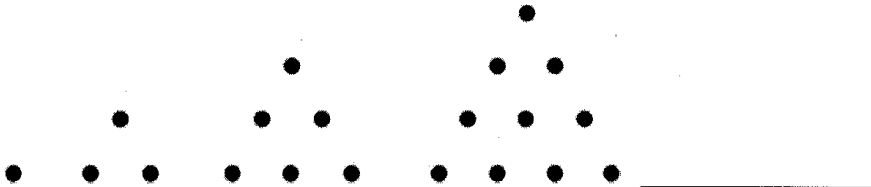
The number of dots in each square forms a sequence of numbers. Write the first 10 terms in this sequence:

Term									
Value									

Describe the pattern \_\_\_\_\_

### THE TRIANGLE SEQUENCE

Extend this dot pattern:



The number of dots in each triangle forms a sequence of numbers. Write the first 10 terms in this sequence:

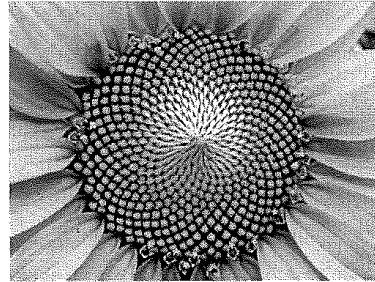
Term									
Value									

Describe the pattern \_\_\_\_\_

Add pairs of numbers that are next to each other in the sequence. What do you notice? \_\_\_\_\_

Write the next five terms of the famous  
Fibonacci Sequence:  
1, 1, 2, 3, 5, . . . . .

TERM X	VALUE Y
1	1
2	1
3	2
4	3
5	5
6	
7	
8	
9	
10	



Describe the Fibonacci Pattern:

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