Name: _____ Date: _____ Period: _____

Sequences #1 Assignment

Find the next three terms in each sequence:

1. 55, 57, 59, 61, . . .

2. 4, 12, 36, 108, . . .

3. 16, 8, 4, 2, . . .

4. -20, -26, -32, -38, . . .

Write a recursive formula for each sequence:

5. 55, 57, 59, 61, . . .

6. 4, 12, 36, 108, . . .

7. 16, 8, 4, 2, . . .

8. -20, -26, -32, -38, . . .

Complete each table.

9.

Term	1st	2nd	3rd	4th	5th	6th	7th	8th
Value	66	50	34	18				

10.

Term	1st	2nd	3rd	4th	5th	6th	7th	8th
Value	-3	9	-27	81				

11.

Term	1st	2nd	3rd	4th	5th	6th	7th	8th
Value	160	80	40	20				

12.

Term	1st	2nd	3rd	4th	5th	6th	7th	8th
Value	-9	-2	5	12				

Fill in the table, then write a recursive equation to describe the sequence.

13. You run a business making birdhouses. You spend $600 to start your business, and it costs you $5.00 to make each birdhouse.

# of birdhouses	1	2	3	4	5	6	7
Total cost to build							

Recursive formula:

14. You borrow $500 from a relative, and you agree to pay back the debt at a rate of $15 per month.

# of months	1	2	3	4	5	6	7
Amount of money owed							

Recursive formula:

15. A population of bacteria begins with 10 organisms then doubles every minute.

# of minutes	1	2	3	4	5	6	7
Amount of bacteria							

Recursive formula:

16. You are saving for a bike and can save $10 per week. You have $25 already saved.

# of weeks	1	2	3	4	5	6	7
Amount of money saved							

Recursive formula: