Unit 3 Day 1 - Sequences #1 Assignment   Name: _____

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.

Mistakes are expected, inspected, respected

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: