

Assignment 1.5 – Geometric Sequences

Fill in the table, then write a sentence explaining how you figured out the values to put in each cell.

1.

x	0	1	2	3	4	5	6
y	2	4	8				

Common Ratio:

Explanation:

2.

x	1	2	3	4	5	6	7
y	1	3	9				

Common Ratio:

Explanation:

3. Claire has \$300 in an account. She decides she is going to take out half of whatever is left in the account at the end of the month.

# of months	0	1	2	3	4
Amount of money left in the account					

Common Ratio:

Explanation:

4. Tania creates a chain letter and sends it to four friends. Each day each friend is then instructed to send the letter to four more friends and so on.

# of days	1	2	3	4	5
Total amount of letters sent out					

Common Ratio:

Explanation:

Refresh Your Memory (hint: expand the table if that helps you)

5. Write the recursive and explicit functions for each arithmetic sequence.

a.

x	0	1	2	3	4	5
y	2	4	6	8		
Change						

Recursive Equation:

Explicit Equation:

b.

x	y	Change
1	3	
2	6	
3	9	
4	12	

Recursive Equation:

Explicit Equation:

c. Miguel has \$300 in an account. He decides he is going to take out \$25 each month.

# of months	0	1	2	3	4	5	6
Amount of money left in account							

Recursive Equation:

Explicit Equation:

d. Each day Jen decides to do something nice (random acts of kindness) for 2 strangers.

# of days	1	2	3	4	5	6	7
Amount of kind acts							

Recursive Equation:

Explicit Equation: