Math 1   Name:_____
Exponential Unit
Wkst 2 – practice write rule find x and y values

1. E. coli bacteria Quadruple in population every twenty minutes. If the initial population is 10 complete the following:
   a. Complete the following table showing the predicted population

	0	1	2	3	4	5	6
Population							

b. y = Rule: _____   c. Recursive Rule_____

d. How many bacteria are present at 5 hours?   e. When does E. coli reach 658?

1. E. coli bacteria Quadruple in population every twelve minutes. If the initial population is 10 complete the following:
   a. Complete the following table showing the predicted population

	0	1	2	3	4	5	6
Population							

b. y = Rule: _____   c. Recursive Rule_____

d. How many bacteria are present at 3 hours?   e. When does E. coli reach 658?

2. E. coli bacteria doubles in population every quarter hour. If the initial population is 8 complete the following:
   a. Complete the following table showing the predicted population

	0	1	2	3	4	5	6
Population							

   b. y = Rule: _____   c. Recursive Rule_____

   d. How many bacteria are present at 5 hours?   e. When does E. coli reach 658?

3. E. coli bacteria grows by 1.5 in population every 10 minutes. If the initial population is 16 complete the following:
   a. Complete the following table showing the predicted population

	0	1	2	3	4	5	6
Population							

   b. y = Rule: _____   c. Recursive Rule_____

   d. How many bacteria are present at 5 hours?   e. When does E. coli reach 658?

4. E. coli bacteria grows by tripling in population every 5 minutes. If the initial population is 2 complete the following:
   a. Complete the following table showing the predicted population

	0	1	2	3	4	5	6
Population							

   b. y = Rule: _____   c. Recursive Rule_____

   d. How many bacteria are present at 5 hours?   e. When does E. coli reach 658?

5. E. coli bacteria grows by tripling in population every 30 minutes. If the initial population is 2 complete the following:
   a. Complete the following table showing the predicted population

	0	1	2	3	4	5	6
Population							

   b. y = Rule: _____   c. Recursive Rule_____

   d. How many bacteria are present at 5 hours?   e. When does E. coli reach 658?