Math 4 Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**1-6 Practice** Date\_\_\_\_\_\_\_\_

1. Show *mathematically* whether each of the following sequences is arithmetic, geometric, or neither. If it is arithmetic or geometric, find an explicit equation to model the sequence.

 a. 

1. -1, 3, -9, 27, . . .
2. 5, 8, 11, 14, . . .
3. Find the 14th term of each sequence. Show your work using the explicit equations.
4. the sequence in part (b) of number 1
5. the sequence in part (c) of number 1

3. Using algebra, find the missing terms of the arithmetic sequence below. Show your work.

{\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_,3 , \_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_, 28}

4. In the sequence in problem (3), which term of the sequence is 603?

5. is which term of the below sequence? Solve algebraically and show work.



5. Suppose you drop a bounce ball from a certain height and measure the height of each bounce. The sequence of heights is geometric. Find an equation for a sequence that generates the bounce heights of the ball if the height of the 5th bounce is 9 ft and the height of the 7th bounce is 5 ft.