General Algebra 2 Worksheet #1 Unit 10 Selected Solutions Use the given formula to write the first five terms of each of the following sequences.

- 1.  $a_1 = 5$ ;  $a_{n+1} = a_n + 3$  <u>5, 8, 11, 14, 17</u>
- 3.  $a_1 = 5$ ;  $a_{n+1} = 3a_n$  <u>5, 15, 45, 135, 405</u>
- 5.  $a_n = 3n + 5$  8, 11, 14, 17, 20
- 7.  $a_n = 3^n$  <u>3, 9, 27, 81, 243</u>

Write a recursive formula for each of the following sequences.

9. 3, 6, 9, 12, ...  $a_1 = 3$ ;  $a_{n+1} = a_n + 3$ 

12. 2, 4, 8, 16, 32, ...  $a_1 = 2$ ;  $a_{n+1} = 2a_n$ 

Write an explicit formula for each of the following sequences.

- 14. 7, 11, 15, 19, ...  $a_n = 4n + 3$
- 16. 2, 4, 8, 16, 32, ...  $a_n = 2^n$