

## General Algebra 2 Worksheet #1 Unit 10 page 1 \_\_\_\_\_

Use the given formula to write the first five terms of each of the following sequences.

1.  $a_1 = 5$  ;  $a_{n+1} = a_n + 3$  \_\_\_\_\_

2.  $a_1 = -3$  ;  $a_{n+1} = a_n + 0.5$  \_\_\_\_\_

3.  $a_1 = 5$  ;  $a_{n+1} = 3a_n$  \_\_\_\_\_

4.  $a_1 = 8$  ;  $a_{n+1} = 0.5a_n$  \_\_\_\_\_

5.  $a_n = 3n + 5$  \_\_\_\_\_

6.  $a_n = 2n - 1$  \_\_\_\_\_

7.  $a_n = 3^n$  \_\_\_\_\_

8.  $a_n = n^2$  \_\_\_\_\_

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Write a recursive formula for each of the following sequences.

9. 3, 6, 9, 12, ...

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10. 7, 11, 15, 19, ...

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11. 10, 9.5, 9, 8.5, 8, ...

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12. 2, 4, 8, 16, 32, ...

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Write an explicit formula for each of the following sequences.

13. 3, 6, 9, 12, ...

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14. 7, 11, 15, 19, ...

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15. 0, 3, 8, 15, 24, 35, 48, ...

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16. 2, 4, 8, 16, 32, ...

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