

Class Name : **8B - B**

Instructor Name : **Ms. Ryan**

Student Name : _____

Instructor Note :

1. The first three terms of an arithmetic sequence are as follows.

2, 8, 14

Find the next two terms of this sequence.

2. The first three terms of an arithmetic sequence are as follows.

19, 28, 37

Find the next two terms of this sequence.

3. The first three terms of an arithmetic sequence are as follows.

33, 25, 17

Find the next two terms of this sequence.

4. The first three terms of an arithmetic sequence are as follows.

-10, -7, -4

Find the next two terms of this sequence.

5. The first three terms of an arithmetic sequence are as follows.

11, 4, -3

Find the next two terms of this sequence.

6. The first three terms of an arithmetic sequence are as follows.

-14, -19, -24

Find the next two terms of this sequence.

7. Find the 64th term of the following arithmetic sequence.

$$5, 14, 23, 32, \dots$$

8. Find the 55th term of the following arithmetic sequence.

$$17, 21, 25, 29, \dots$$

9. Find the 13th term of the arithmetic sequence whose common difference is $d = -6$ and whose first term is $a_1 = 5$.

10. Find the 20th term of the arithmetic sequence whose common difference is $d = 3$ and whose first term is $a_1 = 2$.

11. An arithmetic sequence is given below.

$$-23, -18, -13, -8, \dots$$

Write an explicit formula for the n^{th} term a_n .

12. Find the first four terms of the sequence given by the following.

$$a_n = 6n - 16, \quad n = 1, 2, 3, \dots$$

13. For each sequence, determine whether it appears to be arithmetic.
If it does, find the common difference.

3, -6, 12, -24, ...	<input type="radio"/> Arithmetic Common difference: $d = \square$ <input type="radio"/> Not arithmetic
-2, -5, -8, -11, ...	<input type="radio"/> Arithmetic Common difference: $d = \square$ <input type="radio"/> Not arithmetic
8, 12, 15, 18, ...	<input type="radio"/> Arithmetic Common difference: $d = \square$ <input type="radio"/> Not arithmetic