**Arithmetic Sequence**

 An **arithmetic sequence** is a sequence where every term after the first term is obtained by adding a constant called the **common difference**.

 It a sequence where the difference between any two consecutive terms is constant.

Examples of Arithmetic Sequence

 1, 4, 7, 10,… 15, 11, 7, 3,…

Remember:

 The nth term of an arithmetic sequence is defined as

 $a\_{n}=a\_{1}+\left(n-1\right)d$

where a1 = the first term

 an = the nth term

 d = the common difference

Illustrative examples

A. Determine whether the sequence is arithmetic. If it is, give the common difference.

 a. -3, 2, 7, 12,… b. 4, 8, 16, 32,…

B. Find the 14th term of the arithmetic sequence 5, 7, 9, 11,…

C. In the arithmetic sequence -7, -4, -1, 2,…, what term is 44?

D. If a1 = 5 and a7 = 17, find the common difference.

**Arithmetic Sequence**

 An **arithmetic sequence** is a sequence where every term after the first term is obtained by adding a constant called the **common difference**.

 It a sequence where the difference between any two consecutive terms is constant.

Examples of Arithmetic Sequence

 1, 4, 7, 10,… 15, 11, 7, 3,…

Remember:

 The nth term of an arithmetic sequence is defined as

 $a\_{n}=a\_{1}+\left(n-1\right)d$

where a1 = the first term

 an = the nth term

 d = the common difference

Illustrative examples

A. Determine whether the sequence is arithmetic. If it is, give the common difference.

 a. -3, 2, 7, 12,… b. 4, 8, 16, 32,…

B. Find the 14th term of the arithmetic sequence 5, 7, 9, 11,…

C. In the arithmetic sequence -7, -4, -1, 2,…, what term is 44?

D. If a1 = 5 and a7 = 17, find the common difference.

**Arithmetic Sequence**

 An **arithmetic sequence** is a sequence where every term after the first term is obtained by adding a constant called the **common difference**.

 It a sequence where the difference between any two consecutive terms is constant.

Examples of Arithmetic Sequence

 1, 4, 7, 10,… 15, 11, 7, 3,…

Remember:

 The nth term of an arithmetic sequence is defined as

 $a\_{n}=a\_{1}+\left(n-1\right)d$

where a1 = the first term

 an = the nth term

 d = the common difference

Illustrative examples

A. Determine whether the sequence is arithmetic. If it is, give the common difference.

 a. -3, 2, 7, 12,… b. 4, 8, 16, 32,…

B. Find the 14th term of the arithmetic sequence 5, 7, 9, 11,…

C. In the arithmetic sequence -7, -4, -1, 2,…, what term is 44?

D. If a1 = 5 and a7 = 17, find the common difference.

**Arithmetic Sequence**

 An **arithmetic sequence** is a sequence where every term after the first term is obtained by adding a constant called the **common difference**.

 It a sequence where the difference between any two consecutive terms is constant.

Examples of Arithmetic Sequence

 1, 4, 7, 10,… 15, 11, 7, 3,…

Remember:

 The nth term of an arithmetic sequence is defined as

 $a\_{n}=a\_{1}+\left(n-1\right)d$

where a1 = the first term

 an = the nth term

 d = the common difference

Illustrative examples

A. Determine whether the sequence is arithmetic. If it is, give the common difference.

 a. -3, 2, 7, 12,… b. 4, 8, 16, 32,…

B. Find the 14th term of the arithmetic sequence 5, 7, 9, 11,…

C. In the arithmetic sequence -7, -4, -1, 2,…, what term is 44?

D. If a1 = 5 and a7 = 17, find the common difference.