Algebra II
Lesson #1 Unit 9
Class Worksheet #1
For Worksheets #1-#4

Algebra 2 Class Worksheet #1 Unit 9

Algebra 2 Class Worksheet #1 Unit 9

Sequence

Algebra 2 Class Worksheet #1 Unit 9

Sequence

Examples of sequences:

Algebra 2   Class Worksheet #1   Unit 9

Sequence

Examples of sequences:

5,

Algebra 2   Class Worksheet #1   Unit 9

Sequence

Examples of sequences:

5, 10,

Algebra 2   Class Worksheet #1   Unit 9

Sequence

Examples of sequences:

5, 10, 15,

Algebra 2 Class Worksheet #1 Unit 9

Sequence

Examples of sequences:

5, 10, 15, 20,

Algebra 2 Class Worksheet #1 Unit 9

Sequence

Examples of sequences:

5, 10, 15, 20, 25,

Algebra 2   Class Worksheet #1   Unit 9

Sequence

Examples of sequences:

5, 10, 15, 20, 25, 30,

Algebra 2 Class Worksheet #1 Unit 9

Sequence

Examples of sequences:

5, 10, 15, 20, 25, 30, 35,

Algebra 2 Class Worksheet #1 Unit 9

Sequence

Examples of sequences:

5, 10, 15, 20, 25, 30, 35, 40,

Algebra 2 Class Worksheet #1 Unit 9

Sequence

Examples of sequences:

5, 10, 15, 20, 25, 30, 35, 40, 45, ...

Algebra 2 Class Worksheet #1 Unit 9

Sequence

Examples of sequences:

5, 10, 15, 20, 25, 30, 35, 40, 45, ...

5,

Algebra 2 Class Worksheet #1 Unit 9

Sequence

Examples of sequences:

5, 10, 15, 20, 25, 30, 35, 40, 45, ...

5, 7,

Algebra 2 Class Worksheet #1 Unit 9

Sequence

Examples of sequences:

5, 10, 15, 20, 25, 30, 35, 40, 45, ...

5, 7, 9,

Algebra 2   Class Worksheet #1   Unit 9

Sequence

Examples of sequences:

5, 10, 15, 20, 25, 30, 35, 40, 45, ...

5, 7, 9, 11,

Algebra 2   Class Worksheet #1   Unit 9

Sequence

Examples of sequences:

5, 10, 15, 20, 25, 30, 35, 40, 45, ...

5, 7, 9, 11, 13,

Algebra 2 Class Worksheet #1 Unit 9

Sequence

Examples of sequences:

5, 10, 15, 20, 25, 30, 35, 40, 45, ...

5, 7, 9, 11, 13, 15,

Algebra 2   Class Worksheet #1   Unit 9

Sequence

Examples of sequences:

5, 10, 15, 20, 25, 30, 35, 40, 45, ...

5, 7, 9, 11, 13, 15, 17,

Algebra 2   Class Worksheet #1   Unit 9

Sequence

Examples of sequences:

5, 10, 15, 20, 25, 30, 35, 40, 45, ...

5, 7, 9, 11, 13, 15, 17, 19,

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Sequence

Examples of sequences:

5, 10, 15, 20, 25, 30, 35, 40, 45, ...

5, 7, 9, 11, 13, 15, 17, 19, 21,

Algebra 2 Class Worksheet #1 Unit 9

Sequence

Examples of sequences:

5, 10, 15, 20, 25, 30, 35, 40, 45, ...

5, 7, 9, 11, 13, 15, 17, 19, 21, 23,

Algebra 2 Class Worksheet #1 Unit 9

Sequence

Examples of sequences:

5, 10, 15, 20, 25, 30, 35, 40, 45, ...

5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, ...

Algebra 2 Class Worksheet #1 Unit 9

Sequence

Examples of sequences:

5, 10, 15, 20, 25, 30, 35, 40, 45, ...

5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, ...

2,

Algebra 2   Class Worksheet #1   Unit 9

Sequence

Examples of sequences:

5, 10, 15, 20, 25, 30, 35, 40, 45, ...

5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, ...

2, 4,

Algebra 2 Class Worksheet #1 Unit 9

Sequence

Examples of sequences:

5, 10, 15, 20, 25, 30, 35, 40, 45, ...

5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, ...

2, 4, 8,

Algebra 2   Class Worksheet #1   Unit 9

Sequence

Examples of sequences:

5, 10, 15, 20, 25, 30, 35, 40, 45, ...

5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, ...

2, 4, 8, 16,

Algebra 2   Class Worksheet #1   Unit 9

Sequence

Examples of sequences:

5, 10, 15, 20, 25, 30, 35, 40, 45, ...

5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, ...

2, 4, 8, 16, 32,

Algebra 2 Class Worksheet #1 Unit 9

Sequence

Examples of sequences:

5, 10, 15, 20, 25, 30, 35, 40, 45, ...

5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, ...

2, 4, 8, 16, 32, 64,

Algebra 2 Class Worksheet #1 Unit 9

Sequence

Examples of sequences:

5, 10, 15, 20, 25, 30, 35, 40, 45, ...

5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, ...

2, 4, 8, 16, 32, 64, 128,

Algebra 2   Class Worksheet #1   Unit 9

Sequence

Examples of sequences:

5, 10, 15, 20, 25, 30, 35, 40, 45, ...

5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, ...

2, 4, 8, 16, 32, 64, 128, 256,

Algebra 2 Class Worksheet #1 Unit 9

Sequence

Examples of sequences:

5, 10, 15, 20, 25, 30, 35, 40, 45, ...

5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, ...

2, 4, 8, 16, 32, 64, 128, 256, 512, ...

Algebra 2 Class Worksheet #1 Unit 9

Sequence (informal definition) :

Examples of sequences:

5, 10, 15, 20, 25, 30, 35, 40, 45, ...

5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, ...

2, 4, 8, 16, 32, 64, 128, 256, 512, ...

Algebra 2   Class Worksheet #1   Unit 9

Sequence (informal definition) : A list of numbers in a specific order.

Examples of sequences:

5, 10, 15, 20, 25, 30, 35, 40, 45, ...

5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, ...

2, 4, 8, 16, 32, 64, 128, 256, 512, ...

Algebra 2 Class Worksheet #1 Unit 9

Sequence (informal definition) : A list of numbers in a specific order.

Examples of sequences:

5, 10, 15, 20, 25, 30, 35, 40, 45, ...

5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, ...

2, 4, 8, 16, 32, 64, 128, 256, 512, ...

Each number is called a <u>term</u> of the sequence.

Algebra 2 Class Worksheet #1 Unit 9

Sequence (informal definition) : A list of numbers in a specific order.

Examples of sequences:

Notation

5, 10, 15, 20, 25, 30, 35, 40, 45, ...

5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, ...

2, 4, 8, 16, 32, 64, 128, 256, 512, ...

Each number is called a <u>term</u> of the sequence.

Algebra 2 Class Worksheet #1 Unit 9

Sequence (informal definition) : A list of numbers in a specific order.

Examples of sequences:

Notation

First Term:

5, 10, 15, 20, 25, 30, 35, 40, 45, ...

5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, ...

2, 4, 8, 16, 32, 64, 128, 256, 512, ...

Each number is called a <u>term</u> of the sequence.

Algebra 2 Class Worksheet #1 Unit 9

Sequence (informal definition) : A list of numbers in a specific order.

Examples of sequences:

Notation

First Term: a_1

5, 10, 15, 20, 25, 30, 35, 40, 45, ...

5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, ...

2, 4, 8, 16, 32, 64, 128, 256, 512, ...

Each number is called a term of the sequence.

Algebra 2 Class Worksheet #1 Unit 9

Sequence (informal definition) : A list of numbers in a specific order.

Examples of sequences:

5, 10, 15, 20, 25, 30, 35, 40, 45, ...

5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, ...

2, 4, 8, 16, 32, 64, 128, 256, 512, ...

Each number is called a <u>term</u> of the sequence.

Notation

First Term: a_1

a_1 **is read 'a sub 1'. The 1 is the subscript.**

Algebra 2 Class Worksheet #1 Unit 9

Sequence (informal definition) : A list of numbers in a specific order.

Examples of sequences:

5, 10, 15, 20, 25, 30, 35, 40, 45, ...

5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, ...

2, 4, 8, 16, 32, 64, 128, 256, 512, ...

Each number is called a <u>term</u> of the sequence.

Notation

First Term: a_1

Algebra 2 Class Worksheet #1 Unit 9

Sequence (informal definition) : A list of numbers in a specific order.

Examples of sequences:

5, 10, 15, 20, 25, 30, 35, 40, 45, ...

5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, ...

2, 4, 8, 16, 32, 64, 128, 256, 512, ...

Each number is called a <u>term</u> of the sequence.

Notation

First Term: a_1

Second Term:

Algebra 2 Class Worksheet #1 Unit 9

Sequence (informal definition) : A list of numbers in a specific order.

Examples of sequences:

5, 10, 15, 20, 25, 30, 35, 40, 45, ...

5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, ...

2, 4, 8, 16, 32, 64, 128, 256, 512, ...

Notation

First Term: a_1

Second Term: a_2

Each number is called a <u>term</u> of the sequence.

Algebra 2   Class Worksheet #1   Unit 9

Sequence (informal definition) : A list of numbers in a specific order.

Examples of sequences:

5, 10, 15, 20, 25, 30, 35, 40, 45, ...

5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, ...

2, 4, 8, 16, 32, 64, 128, 256, 512, ...

Notation

First Term: a_1

Second Term: a_2

Third Term:

Each number is called a <u>term</u> of the sequence.

Algebra 2 Class Worksheet #1 Unit 9

Sequence (informal definition) : A list of numbers in a specific order.

Examples of sequences:

5, 10, 15, 20, 25, 30, 35, 40, 45, ...

5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, ...

2, 4, 8, 16, 32, 64, 128, 256, 512, ...

Notation

First Term: a_1

Second Term: a_2

Third Term: a_3

Each number is called a term of the sequence.

Algebra 2 Class Worksheet #1 Unit 9

Sequence (informal definition) : A list of numbers in a specific order.

Examples of sequences:

5, 10, 15, 20, 25, 30, 35, 40, 45, ...

5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, ...

2, 4, 8, 16, 32, 64, 128, 256, 512, ...

Notation

First Term: a_1

Second Term: a_2

Third Term: a_3

The n^{th} Term:

Each number is called a <u>term</u> of the sequence.

Algebra 2 Class Worksheet #1 Unit 9

Sequence (informal definition) : A list of numbers in a specific order.

Examples of sequences:

5, 10, 15, 20, 25, 30, 35, 40, 45, ...

5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, ...

2, 4, 8, 16, 32, 64, 128, 256, 512, ...

Notation

First Term: a_1

Second Term: a_2

Third Term: a_3

The n^{th} Term: a_n

Each number is called a <u>term</u> of the sequence.

Algebra 2 Class Worksheet #1 Unit 9

Algebra 2 Class Worksheet #1 Unit 9

There are two common ways used to define sequences.

Algebra 2 Class Worksheet #1 Unit 9

There are two common ways used to define sequences.

1. Using an explicit formula

Algebra 2   Class Worksheet #1   Unit 9

There are two common ways used to define sequences.

1. **Using an explicit formula**
2. **Using a recursive formula**

Algebra 2 Class Worksheet #1 Unit 9

There are two common ways used to define sequences.

1. **Using an explicit formula**
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Algebra 2   Class Worksheet #1   Unit 9

There are two common ways used to define sequences.

1. **Using an explicit formula**
2. **Using a recursive formula**

An explicit formula gives a_n as a function of n.

Algebra 2 Class Worksheet #1 Unit 9

There are two common ways used to define sequences.

1. **Using an explicit formula**
2. **Using a recursive formula**

An explicit formula gives a_n as a function of n.

Examples of explicit formulas:

Algebra 2   Class Worksheet #1   Unit 9

There are two common ways used to define sequences.

1. **Using an explicit formula**
2. **Using a recursive formula**

An explicit formula gives a_n as a function of n.

Examples of explicit formulas:

a. $a_n = 5n$

Algebra 2 Class Worksheet #1 Unit 9

There are two common ways used to define sequences.

1. **Using an explicit formula**
2. **Using a recursive formula**

An explicit formula gives a_n as a function of n.

Examples of explicit formulas:

Definition

a. $a_n = 5n$

Algebra 2   Class Worksheet #1   Unit 9

There are two common ways used to define sequences.

1. **Using an explicit formula**
2. **Using a recursive formula**

An explicit formula gives a_n as a function of n.

Examples of explicit formulas:

Definition

a. $a_n = 5n$

$a_1 =$

Algebra 2 Class Worksheet #1 Unit 9

There are two common ways used to define sequences.

1. **Using an explicit formula**
2. **Using a recursive formula**

An explicit formula gives a_n as a function of n.

Examples of explicit formulas:

Definition

a. $a_n = 5n$

$a_1 =$

(the first term)

Algebra 2 Class Worksheet #1 Unit 9

There are two common ways used to define sequences.

1. **Using an explicit formula**
2. **Using a recursive formula**

An explicit formula gives a_n as a function of n.

Examples of explicit formulas:

Definition

a. $a_n = 5n$

$a_1 = 5(1)$

(the first term)

Algebra 2 Class Worksheet #1 Unit 9

There are two common ways used to define sequences.

1. **Using an explicit formula**
2. **Using a recursive formula**

An explicit formula gives a_n as a function of n.

Examples of explicit formulas:

	Definition	Sequence
a.	$a_n = 5n$	

$a_1 = 5(1)$

(the first term)

Algebra 2 Class Worksheet #1 Unit 9

There are two common ways used to define sequences.

1. **Using an explicit formula**
2. **Using a recursive formula**

An explicit formula gives a_n as a function of n.

Examples of explicit formulas:

	Definition	Sequence
a.	$a_n = 5n$	5,

$a_1 = 5(1)$

(the first term)

Algebra 2   Class Worksheet #1   Unit 9

There are two common ways used to define sequences.

1. **Using an explicit formula**
2. **Using a recursive formula**

An explicit formula gives a_n as a function of n.

Examples of explicit formulas:

	Definition	Sequence
a.	$a_n = 5n$	5,

Algebra 2 Class Worksheet #1 Unit 9

There are two common ways used to define sequences.

1. **Using an explicit formula**
2. **Using a recursive formula**

An explicit formula gives a_n as a function of n.

Examples of explicit formulas:

	Definition	Sequence
a.	$a_n = 5n$	5,

$a_2 =$

Algebra 2 Class Worksheet #1 Unit 9

There are two common ways used to define sequences.

1. **Using an explicit formula**
2. **Using a recursive formula**

An explicit formula gives a_n as a function of n.

Examples of explicit formulas:

	Definition	**Sequence**
a.	$a_n = 5n$	**5,**

$a_2 =$

(the second term)

Algebra 2 Class Worksheet #1 Unit 9

There are two common ways used to define sequences.

1. **Using an explicit formula**
2. **Using a recursive formula**

An explicit formula gives a_n as a function of n.

Examples of explicit formulas:

	Definition	Sequence
a.	$a_n = 5n$	5,

$a_2 = 5(2)$

(the second term)

Algebra 2 Class Worksheet #1 Unit 9

There are two common ways used to define sequences.

1. **Using an explicit formula**
2. **Using a recursive formula**

An explicit formula gives a_n as a function of n.

Examples of explicit formulas:

	Definition	Sequence
a.	$a_n = 5n$	5, 10,

$a_2 = 5(2)$

(the second term)

Algebra 2 Class Worksheet #1 Unit 9

There are two common ways used to define sequences.

1. **Using an explicit formula**
2. **Using a recursive formula**

An explicit formula gives a_n as a function of n.

Examples of explicit formulas:

	Definition	Sequence
a.	$a_n = 5n$	5, 10,

Algebra 2 Class Worksheet #1 Unit 9

There are two common ways used to define sequences.

1. **Using an explicit formula**
2. **Using a recursive formula**

An explicit formula gives a_n as a function of n.

Examples of explicit formulas:

	Definition	Sequence
a.	$a_n = 5n$	5, 10,

$a_3 =$

Algebra 2 Class Worksheet #1 Unit 9

There are two common ways used to define sequences.

1. **Using an explicit formula**
2. **Using a recursive formula**

An explicit formula gives a_n as a function of n.

Examples of explicit formulas:

	Definition	Sequence
a.	$a_n = 5n$	5, 10,

$a_3 = 5(3)$

Algebra 2 Class Worksheet #1 Unit 9

There are two common ways used to define sequences.

1. **Using an explicit formula**
2. **Using a recursive formula**

An explicit formula gives a_n as a function of n.

Examples of explicit formulas:

	Definition	Sequence
a.	$a_n = 5n$	5, 10, 15,

$a_3 = 5(3)$

Algebra 2 Class Worksheet #1 Unit 9

There are two common ways used to define sequences.

1. **Using an explicit formula**
2. **Using a recursive formula**

An explicit formula gives a_n as a function of n.

Examples of explicit formulas:

	Definition	Sequence
a.	$a_n = 5n$	5, 10, 15,

Algebra 2 Class Worksheet #1 Unit 9

There are two common ways used to define sequences.

1. **Using an explicit formula**
2. **Using a recursive formula**

An explicit formula gives a_n as a function of n.

Examples of explicit formulas:

	Definition	Sequence
a.	$a_n = 5n$	5, 10, 15,

$a_4 =$

Algebra 2 Class Worksheet #1 Unit 9

There are two common ways used to define sequences.

1. **Using an explicit formula**
2. **Using a recursive formula**

An explicit formula gives a_n as a function of n.

Examples of explicit formulas:

	Definition	**Sequence**
a.	$a_n = 5n$	5, 10, 15,

$a_4 = 5(4)$

Algebra 2 Class Worksheet #1 Unit 9

There are two common ways used to define sequences.

1. **Using an explicit formula**
2. **Using a recursive formula**

An explicit formula gives a_n as a function of n.

Examples of explicit formulas:

	Definition	Sequence
a.	$a_n = 5n$	5, 10, 15, 20,

$a_4 = 5(4)$

Algebra 2 Class Worksheet #1 Unit 9

There are two common ways used to define sequences.

1. **Using an explicit formula**
2. **Using a recursive formula**

An explicit formula gives a_n as a function of n.

Examples of explicit formulas:

	Definition	Sequence
a.	$a_n = 5n$	5, 10, 15, 20,

Algebra 2 Class Worksheet #1 Unit 9

There are two common ways used to define sequences.

1. **Using an explicit formula**
2. **Using a recursive formula**

An explicit formula gives a_n as a function of n.

Examples of explicit formulas:

	Definition	Sequence
a.	$a_n = 5n$	5, 10, 15, 20,

$a_5 =$

Algebra 2 Class Worksheet #1 Unit 9

There are two common ways used to define sequences.

1. **Using an explicit formula**
2. **Using a recursive formula**

An explicit formula gives a_n as a function of n.

Examples of explicit formulas:

	Definition	Sequence
a.	$a_n = 5n$	5, 10, 15, 20,

$a_5 = 5(5)$

Algebra 2 Class Worksheet #1 Unit 9

There are two common ways used to define sequences.

1. **Using an explicit formula**
2. **Using a recursive formula**

An explicit formula gives a_n as a function of n.

Examples of explicit formulas:

	Definition	Sequence
a.	$a_n = 5n$	5, 10, 15, 20, 25,

$a_5 = 5(5)$

Algebra 2 Class Worksheet #1 Unit 9

There are two common ways used to define sequences.

1. **Using an explicit formula**
2. **Using a recursive formula**

An explicit formula gives a_n as a function of n.

Examples of explicit formulas:

	Definition	Sequence
a.	$a_n = 5n$	5, 10, 15, 20, 25,

Algebra 2 Class Worksheet #1 Unit 9

There are two common ways used to define sequences.

1. **Using an explicit formula**
2. **Using a recursive formula**

An explicit formula gives a_n as a function of n.

Examples of explicit formulas:

	Definition	Sequence
a.	$a_n = 5n$	5, 10, 15, 20, 25,

$a_6 =$

Algebra 2 Class Worksheet #1 Unit 9

There are two common ways used to define sequences.

1. **Using an explicit formula**
2. **Using a recursive formula**

An explicit formula gives a_n as a function of n.

Examples of explicit formulas:

	Definition	Sequence
a.	$a_n = 5n$	5, 10, 15, 20, 25,

$$a_6 = 5(6)$$

Algebra 2 Class Worksheet #1 Unit 9

There are two common ways used to define sequences.

1. **Using an explicit formula**
2. **Using a recursive formula**

An explicit formula gives a_n as a function of n.

Examples of explicit formulas:

	Definition	Sequence
a.	$a_n = 5n$	5, 10, 15, 20, 25, 30,

$a_6 = 5(6)$

Algebra 2 Class Worksheet #1 Unit 9

There are two common ways used to define sequences.

1. **Using an explicit formula**
2. **Using a recursive formula**

An explicit formula gives a_n as a function of n.

Examples of explicit formulas:

	Definition	Sequence
a.	$a_n = 5n$	5, 10, 15, 20, 25, 30, ...

Algebra 2 Class Worksheet #1 Unit 9

There are two common ways used to define sequences.

1. **Using an explicit formula**
2. **Using a recursive formula**

An explicit formula gives a_n as a function of n.

Examples of explicit formulas:

	Definition	Sequence
a.	$a_n = 5n$	5, 10, 15, 20, 25, 30, ...
b.	$a_n = 2n + 3$	

Algebra 2 Class Worksheet #1 Unit 9

There are two common ways used to define sequences.

1. **Using an explicit formula**
2. **Using a recursive formula**

An explicit formula gives a_n as a function of n.

Examples of explicit formulas:

	Definition	Sequence
a.	$a_n = 5n$	5, 10, 15, 20, 25, 30, ...
b.	$a_n = 2n + 3$	

$a_1 =$

Algebra 2 Class Worksheet #1 Unit 9

There are two common ways used to define sequences.

1. **Using an explicit formula**
2. **Using a recursive formula**

An explicit formula gives a_n as a function of n.

Examples of explicit formulas:

	Definition	Sequence
a.	$a_n = 5n$	5, 10, 15, 20, 25, 30, ...
b.	$a_n = 2n + 3$	

$a_1 = 2(1) + 3$

Algebra 2 Class Worksheet #1 Unit 9

There are two common ways used to define sequences.

1. **Using an explicit formula**
2. **Using a recursive formula**

An explicit formula gives a_n as a function of n.

Examples of explicit formulas:

	Definition	Sequence
a.	$a_n = 5n$	5, 10, 15, 20, 25, 30, ...
b.	$a_n = 2n + 3$	5,

$$a_1 = 2(1) + 3$$

Algebra 2 Class Worksheet #1 Unit 9

There are two common ways used to define sequences.

1. **Using an explicit formula**
2. **Using a recursive formula**

An explicit formula gives a_n as a function of n.

Examples of explicit formulas:

	Definition	Sequence
a.	$a_n = 5n$	5, 10, 15, 20, 25, 30, ...
b.	$a_n = 2n + 3$	5,

Algebra 2 Class Worksheet #1 Unit 9

There are two common ways used to define sequences.

1. **Using an explicit formula**
2. **Using a recursive formula**

An explicit formula gives a_n as a function of n.

Examples of explicit formulas:

	Definition	Sequence
a.	$a_n = 5n$	5, 10, 15, 20, 25, 30, ...
b.	$a_n = 2n + 3$	5,

$a_2 =$

Algebra 2 Class Worksheet #1 Unit 9

There are two common ways used to define sequences.

1. **Using an explicit formula**
2. **Using a recursive formula**

An explicit formula gives a_n as a function of n.

Examples of explicit formulas:

	Definition	Sequence
a.	$a_n = 5n$	5, 10, 15, 20, 25, 30, ...
b.	$a_n = 2n + 3$	5,

$$a_2 = 2(2) + 3$$

Algebra 2 Class Worksheet #1 Unit 9

There are two common ways used to define sequences.

1. **Using an explicit formula**
2. **Using a recursive formula**

An explicit formula gives a_n as a function of n.

Examples of explicit formulas:

	Definition	Sequence
a.	$a_n = 5n$	5, 10, 15, 20, 25, 30, ...
b.	$a_n = 2n + 3$	5, 7,

$$a_2 = 2(2) + 3$$

Algebra 2 Class Worksheet #1 Unit 9

There are two common ways used to define sequences.

1. **Using an explicit formula**
2. **Using a recursive formula**

An explicit formula gives a_n as a function of n.

Examples of explicit formulas:

	Definition	Sequence
a.	$a_n = 5n$	5, 10, 15, 20, 25, 30, ...
b.	$a_n = 2n + 3$	5, 7,

Algebra 2   Class Worksheet #1   Unit 9

There are two common ways used to define sequences.

1. **Using an explicit formula**
2. **Using a recursive formula**

An explicit formula gives a_n as a function of n.

Examples of explicit formulas:

	Definition	Sequence
a.	$a_n = 5n$	5, 10, 15, 20, 25, 30, ...
b.	$a_n = 2n + 3$	5, 7,

$a_3 =$

Algebra 2 Class Worksheet #1 Unit 9

There are two common ways used to define sequences.

1. **Using an explicit formula**
2. **Using a recursive formula**

An explicit formula gives a_n as a function of n.

Examples of explicit formulas:

	Definition	Sequence
a.	$a_n = 5n$	5, 10, 15, 20, 25, 30, ...
b.	$a_n = 2n + 3$	5, 7,

$$a_3 = 2(3) + 3$$

Algebra 2 Class Worksheet #1 Unit 9

There are two common ways used to define sequences.

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An explicit formula gives a_n as a function of n.

Examples of explicit formulas:

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Clearly, n can be any positive integer.

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Clearly, n can be any positive integer. For example, in sequence #1, if n = 100,

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Clearly, n can be any positive integer. For example, in sequence #1, if n = 100, then a_{100}, the 100th term, is 5(100) = 500.

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Clearly, n can be any positive integer. For example, in sequence #2,

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	Definition	Sequence
a.	$a_n = 5n$	5, 10, 15, 20, 25, 30, ...
b.	$a_n = 2n + 3$	5, 7, 9, 11, 13, 15, ...
c.	$a_n = 2^n$	2, 4, 8, 16, 32, 64, ...

Clearly, n can be any positive integer.

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Clearly, n can be any positive integer. For example, in sequence #3, if n = 100,

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Clearly, n can be any positive integer. For example, in sequence #3, if n = 100, then $a_{100} = 2^{100}$. (about 1.27×10^{30} !!)

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If n = 1,

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Examples of recursive formulas:

	Definition	Sequence
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If n = 1, then a_2 =

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If n = 1, then $a_2 = a_1$

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If n = 1, then $a_2 = a_1 + 5 = 5 + 5$

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Examples of recursive formulas:

	Definition	Sequence
a.	$a_1 = 5$; $a_{n+1} = a_n + 5$	5,

If n = 1, then $a_2 = a_1 + 5 = 5 + 5 = 10$

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If n = 2,

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If n = 2, then a_3

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If n = 2, then $a_3 = a_2 + 5 = 10 + 5 = 15$

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Examples of recursive formulas:

	Definition	Sequence
a.	$a_1 = 5$; $a_{n+1} = a_n + 5$	5, 10, 15,

Notice that to get the 'next term' of the sequence,

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Examples of recursive formulas:

	Definition	Sequence
a.	$a_1 = 5$; $a_{n+1} = a_n + 5$	5, 10, 15,

Notice that to get the 'next term' of the sequence, you add 5.

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Examples of recursive formulas:

	Definition	Sequence
a.	$a_1 = 5$; $a_{n+1} = a_n + 5$	5, 10, 15,

Notice that to get the 'next term' of the sequence, you add 5. The pattern continues.

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Examples of recursive formulas:

	Definition	Sequence
a.	$a_1 = 5$; $a_{n+1} = a_n + 5$	5, 10, 15, 20,

Notice that to get the 'next term' of the sequence, you add 5. The pattern continues.

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Examples of recursive formulas:

Definition	Sequence
a. $a_1 = 5$; $a_{n+1} = a_n + 5$	5, 10, 15, 20, 25,

Notice that to get the 'next term' of the sequence, you add 5. The pattern continues.

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	Definition	Sequence
a.	$a_1 = 5$; $a_{n+1} = a_n + 5$	5, 10, 15, 20, 25, 30, ...
b.	$a_1 = 5$; $a_{n+1} = a_n + 2$	

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Notice that in each of these examples, you are given a_1, the first term. You are also given a formula which tells how to find the 'next term'. This allows you to extend the sequence.

Algebra 2   Class Worksheet #1   Unit 9

Algebra 2   Class Worksheet #1   Unit 9

Use the given formula to write the first 5 terms of each sequence.

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ ________________________

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

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$a_1 =$

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1. $a_n = 2n - 1$ **1, 3, 5, __________**

$a_3 = 2(3) - 1$

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ 1, 3, 5, ____________________

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ **1, 3, 5, ____________**

$a_4 =$

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ 1, 3, 5, ____________

$a_4 = 2(4) - 1$

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ **1, 3, 5, 7, ________**

$a_4 = 2(4) - 1$

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ **1, 3, 5, 7,** ______

Algebra 2   Class Worksheet #1   Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ **1, 3, 5, 7,** ____________

$a_5 =$

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ **1, 3, 5, 7,** ____________

$a_5 = 2(5) - 1$

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ **1, 3, 5, 7, 9**

$a_5 = 2(5) - 1$

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ **1, 3, 5, 7, 9**

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ 1, 3, 5, 7, 9

2. $a_n = n^2$ ____________________

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ $\underline{\quad 1, 3, 5, 7, 9 \qquad\qquad}$

2. $a_n = n^2$ $\underline{\qquad\qquad\qquad\qquad}$

$a_1 =$

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ **1, 3, 5, 7, 9**

2. $a_n = n^2$ ____________________

$a_1 = 1^2$

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ 1, 3, 5, 7, 9

2. $a_n = n^2$ 1,

$a_1 = 1^2$

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ 1, 3, 5, 7, 9

2. $a_n = n^2$ 1,

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ **1, 3, 5, 7, 9**

2. $a_n = n^2$ **1,**

$a_2 =$

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ 1, 3, 5, 7, 9 ________

2. $a_n = n^2$ 1, ________

$a_2 = 2^2$

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ 1, 3, 5, 7, 9 ________

2. $a_n = n^2$ 1, 4, ________

$a_2 = 2^2$

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ 1, 3, 5, 7, 9 ______________________

2. $a_n = n^2$ 1, 4, ______________________

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ 1, 3, 5, 7, 9

2. $a_n = n^2$ 1, 4,

$a_3 =$

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ 1, 3, 5, 7, 9

2. $a_n = n^2$ 1, 4,

$a_3 = 3^2$

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ 1, 3, 5, 7, 9 ______

2. $a_n = n^2$ 1, 4, 9, ______

$a_3 = 3^2$

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ 1, 3, 5, 7, 9

2. $a_n = n^2$ 1, 4, 9,

Algebra 2   Class Worksheet #1   Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ 1, 3, 5, 7, 9

2. $a_n = n^2$ 1, 4, 9,

$a_4 =$

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ **1, 3, 5, 7, 9**

2. $a_n = n^2$ **1, 4, 9,**

$a_4 = 4^2$

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ 1, 3, 5, 7, 9

2. $a_n = n^2$ 1, 4, 9, 16,

$a_4 = 4^2$

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ 1, 3, 5, 7, 9

2. $a_n = n^2$ 1, 4, 9, 16,

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ 1, 3, 5, 7, 9

2. $a_n = n^2$ 1, 4, 9, 16,

$a_5 =$

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ **1, 3, 5, 7, 9**

2. $a_n = n^2$ **1, 4, 9, 16,**

$a_5 = 5^2$

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ 1, 3, 5, 7, 9

2. $a_n = n^2$ 1, 4, 9, 16, 25

$a_5 = 5^2$

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ 1, 3, 5, 7, 9

2. $a_n = n^2$ 1, 4, 9, 16, 25

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ **1, 3, 5, 7, 9**

2. $a_n = n^2$ **1, 4, 9, 16, 25**

3. $a_n = 2(3)^{n-1}$ ______

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ 1, 3, 5, 7, 9

2. $a_n = n^2$ 1, 4, 9, 16, 25

3. $a_n = 2(3)^{n-1}$ ______

$a_1 =$

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ 1, 3, 5, 7, 9

2. $a_n = n^2$ 1, 4, 9, 16, 25

3. $a_n = 2(3)^{n-1}$ ________________

$$a_1 = 2(3)^0$$

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ $\qquad$ 1, 3, 5, 7, 9

2. $a_n = n^2$ $\qquad$ 1, 4, 9, 16, 25

3. $a_n = 2(3)^{n-1}$ $\qquad$ ______

$$a_1 = 2(3)^0 = 2(1) =$$

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ 1, 3, 5, 7, 9 __________

2. $a_n = n^2$ 1, 4, 9, 16, 25 __________

3. $a_n = 2(3)^{n-1}$ 2, __________

$$a_1 = 2(3)^0 = 2(1) =$$

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ 1, 3, 5, 7, 9
2. $a_n = n^2$ 1, 4, 9, 16, 25
3. $a_n = 2(3)^{n-1}$ 2,

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ 1, 3, 5, 7, 9

2. $a_n = n^2$ 1, 4, 9, 16, 25

3. $a_n = 2(3)^{n-1}$ 2, ____

$a_2 =$

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ 1, 3, 5, 7, 9

2. $a_n = n^2$ 1, 4, 9, 16, 25

3. $a_n = 2(3)^{n-1}$ 2,

$$a_2 = 2(3)^1 =$$

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ $\quad$ 1, 3, 5, 7, 9

2. $a_n = n^2$ $\quad$ 1, 4, 9, 16, 25

3. $a_n = 2(3)^{n-1}$ $\quad$ 2,

$$a_2 = 2(3)^1 = 2(3) =$$

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ 1, 3, 5, 7, 9

2. $a_n = n^2$ 1, 4, 9, 16, 25

3. $a_n = 2(3)^{n-1}$ 2, 6,

$$a_2 = 2(3)^1 = 2(3) =$$

Algebra 2   Class Worksheet #1   Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ $\qquad$ 1, 3, 5, 7, 9

2. $a_n = n^2$ $\qquad$ 1, 4, 9, 16, 25

3. $a_n = 2(3)^{n-1}$ $\qquad$ 2, 6,

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ 1, 3, 5, 7, 9

2. $a_n = n^2$ 1, 4, 9, 16, 25

3. $a_n = 2(3)^{n-1}$ 2, 6,

$a_3 =$

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ 1, 3, 5, 7, 9

2. $a_n = n^2$ 1, 4, 9, 16, 25

3. $a_n = 2(3)^{n-1}$ 2, 6,

$a_3 = 2(3)^2 =$

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ — 1, 3, 5, 7, 9

2. $a_n = n^2$ — 1, 4, 9, 16, 25

3. $a_n = 2(3)^{n-1}$ — 2, 6,

$$a_3 = 2(3)^2 = 2(9) =$$

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ 1, 3, 5, 7, 9

2. $a_n = n^2$ 1, 4, 9, 16, 25

3. $a_n = 2(3)^{n-1}$ 2, 6, 18,

$$a_3 = 2(3)^2 = 2(9) =$$

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ 1, 3, 5, 7, 9

2. $a_n = n^2$ 1, 4, 9, 16, 25

3. $a_n = 2(3)^{n-1}$ 2, 6, 18,

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ $\underline{\quad 1, 3, 5, 7, 9 \quad}$

2. $a_n = n^2$ $\underline{\quad 1, 4, 9, 16, 25 \quad}$

3. $a_n = 2(3)^{n-1}$ $\underline{\quad 2, 6, 18, \quad}$

$a_4 =$

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ **1, 3, 5, 7, 9**

2. $a_n = n^2$ **1, 4, 9, 16, 25**

3. $a_n = 2(3)^{n-1}$ **2, 6, 18,**

$$a_4 = 2(3)^3 =$$

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ 1, 3, 5, 7, 9

2. $a_n = n^2$ 1, 4, 9, 16, 25

3. $a_n = 2(3)^{n-1}$ 2, 6, 18,

$$a_4 = 2(3)^3 = 2(27) =$$

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ **1, 3, 5, 7, 9**

2. $a_n = n^2$ **1, 4, 9, 16, 25**

3. $a_n = 2(3)^{n-1}$ **2, 6, 18, 54,**

$$a_4 = 2(3)^3 = 2(27) =$$

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ **1, 3, 5, 7, 9**

2. $a_n = n^2$ **1, 4, 9, 16, 25**

3. $a_n = 2(3)^{n-1}$ **2, 6, 18, 54,**

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ — 1, 3, 5, 7, 9

2. $a_n = n^2$ — 1, 4, 9, 16, 25

3. $a_n = 2(3)^{n-1}$ — 2, 6, 18, 54,

$a_5 =$

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ 1, 3, 5, 7, 9

2. $a_n = n^2$ 1, 4, 9, 16, 25

3. $a_n = 2(3)^{n-1}$ 2, 6, 18, 54,

$a_5 = 2(3)^4 =$

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ 1, 3, 5, 7, 9

2. $a_n = n^2$ 1, 4, 9, 16, 25

3. $a_n = 2(3)^{n-1}$ 2, 6, 18, 54,

$$a_5 = 2(3)^4 = 2(81) =$$

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ 1, 3, 5, 7, 9

2. $a_n = n^2$ 1, 4, 9, 16, 25

3. $a_n = 2(3)^{n-1}$ 2, 6, 18, 54, 162

$a_5 = 2(3)^4 = 2(81) =$

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ **1, 3, 5, 7, 9**

2. $a_n = n^2$ **1, 4, 9, 16, 25**

3. $a_n = 2(3)^{n-1}$ **2, 6, 18, 54, 162**

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ 1, 3, 5, 7, 9 ____________

2. $a_n = n^2$ 1, 4, 9, 16, 25 ____________

3. $a_n = 2(3)^{n-1}$ 2, 6, 18, 54, 162 ____________

4. $a_1 = 3$; $a_{n+1} = a_n + 2.5$ ____________

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ 1, 3, 5, 7, 9

2. $a_n = n^2$ 1, 4, 9, 16, 25

3. $a_n = 2(3)^{n-1}$ 2, 6, 18, 54, 162

4. $a_1 = 3$; $a_{n+1} = a_n + 2.5$ ______________________

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ 1, 3, 5, 7, 9

2. $a_n = n^2$ 1, 4, 9, 16, 25

3. $a_n = 2(3)^{n-1}$ 2, 6, 18, 54, 162

4. $a_1 = 3$; $a_{n+1} = a_n + 2.5$ 3,

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ 1, 3, 5, 7, 9

2. $a_n = n^2$ 1, 4, 9, 16, 25

3. $a_n = 2(3)^{n-1}$ 2, 6, 18, 54, 162

4. $a_1 = 3$; $a_{n+1} = a_n + 2.5$ 3,

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ 1, 3, 5, 7, 9

2. $a_n = n^2$ 1, 4, 9, 16, 25

3. $a_n = 2(3)^{n-1}$ 2, 6, 18, 54, 162

4. $a_1 = 3$; $a_{n+1} = a_n + 2.5$ 3,

Add 2.5 recursively.

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ 1, 3, 5, 7, 9

2. $a_n = n^2$ 1, 4, 9, 16, 25

3. $a_n = 2(3)^{n-1}$ 2, 6, 18, 54, 162

4. $a_1 = 3$; $a_{n+1} = a_n + 2.5$ 3, 5.5,

Add 2.5 recursively.

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ 1, 3, 5, 7, 9

2. $a_n = n^2$ 1, 4, 9, 16, 25

3. $a_n = 2(3)^{n-1}$ 2, 6, 18, 54, 162

4. $a_1 = 3$; $a_{n+1} = a_n + 2.5$ 3, 5.5,

Add 2.5 recursively.

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ 1, 3, 5, 7, 9

2. $a_n = n^2$ 1, 4, 9, 16, 25

3. $a_n = 2(3)^{n-1}$ 2, 6, 18, 54, 162

4. $a_1 = 3$; $a_{n+1} = a_n + 2.5$ 3, 5.5, 8,

Add 2.5 recursively.

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ 1, 3, 5, 7, 9

2. $a_n = n^2$ 1, 4, 9, 16, 25

3. $a_n = 2(3)^{n-1}$ 2, 6, 18, 54, 162

4. $a_1 = 3$; $a_{n+1} = a_n + 2.5$ 3, 5.5, 8,

Add 2.5 recursively.

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ 1, 3, 5, 7, 9

2. $a_n = n^2$ 1, 4, 9, 16, 25

3. $a_n = 2(3)^{n-1}$ 2, 6, 18, 54, 162

4. $a_1 = 3$; $a_{n+1} = a_n + 2.5$ 3, 5.5, 8, 10.5,

Add 2.5 recursively.

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ 1, 3, 5, 7, 9

2. $a_n = n^2$ 1, 4, 9, 16, 25

3. $a_n = 2(3)^{n-1}$ 2, 6, 18, 54, 162

4. $a_1 = 3$; $a_{n+1} = a_n + 2.5$ 3, 5.5, 8, 10.5,

Add 2.5 recursively.

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ 1, 3, 5, 7, 9

2. $a_n = n^2$ 1, 4, 9, 16, 25

3. $a_n = 2(3)^{n-1}$ 2, 6, 18, 54, 162

4. $a_1 = 3$; $a_{n+1} = a_n + 2.5$ 3, 5.5, 8, 10.5, 13

Add 2.5 recursively.

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ 1, 3, 5, 7, 9
2. $a_n = n^2$ 1, 4, 9, 16, 25
3. $a_n = 2(3)^{n-1}$ 2, 6, 18, 54, 162
4. $a_1 = 3$; $a_{n+1} = a_n + 2.5$ 3, 5.5, 8, 10.5, 13

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ — 1, 3, 5, 7, 9

2. $a_n = n^2$ — 1, 4, 9, 16, 25

3. $a_n = 2(3)^{n-1}$ — 2, 6, 18, 54, 162

4. $a_1 = 3$; $a_{n+1} = a_n + 2.5$ — 3, 5.5, 8, 10.5, 13

5. $a_1 = 3$; $a_{n+1} = .5a_n$ — ____________________

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ 1, 3, 5, 7, 9

2. $a_n = n^2$ 1, 4, 9, 16, 25

3. $a_n = 2(3)^{n-1}$ 2, 6, 18, 54, 162

4. $a_1 = 3$; $a_{n+1} = a_n + 2.5$ 3, 5.5, 8, 10.5, 13

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

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ — 1, 3, 5, 7, 9
2. $a_n = n^2$ — 1, 4, 9, 16, 25
3. $a_n = 2(3)^{n-1}$ — 2, 6, 18, 54, 162
4. $a_1 = 3$; $a_{n+1} = a_n + 2.5$ — 3, 5.5, 8, 10.5, 13
5. $a_1 = 3$; $a_{n+1} = .5a_n$ — 3,

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ 1, 3, 5, 7, 9

2. $a_n = n^2$ 1, 4, 9, 16, 25

3. $a_n = 2(3)^{n-1}$ 2, 6, 18, 54, 162

4. $a_1 = 3$; $a_{n+1} = a_n + 2.5$ 3, 5.5, 8, 10.5, 13

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

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ — 1, 3, 5, 7, 9

2. $a_n = n^2$ — 1, 4, 9, 16, 25

3. $a_n = 2(3)^{n-1}$ — 2, 6, 18, 54, 162

4. $a_1 = 3$; $a_{n+1} = a_n + 2.5$ — 3, 5.5, 8, 10.5, 13

5. $a_1 = 3$; $a_{n+1} = .5a_n$ — 3,

Multiply by .5 recursively.

Algebra 2   Class Worksheet #1   Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ 1, 3, 5, 7, 9

2. $a_n = n^2$ 1, 4, 9, 16, 25

3. $a_n = 2(3)^{n-1}$ 2, 6, 18, 54, 162

4. $a_1 = 3$; $a_{n+1} = a_n + 2.5$ 3, 5.5, 8, 10.5, 13

5. $a_1 = 3$; $a_{n+1} = .5a_n$ 3, 1.5,

Multiply by .5 recursively.

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ 1, 3, 5, 7, 9

2. $a_n = n^2$ 1, 4, 9, 16, 25

3. $a_n = 2(3)^{n-1}$ 2, 6, 18, 54, 162

4. $a_1 = 3$; $a_{n+1} = a_n + 2.5$ 3, 5.5, 8, 10.5, 13

5. $a_1 = 3$; $a_{n+1} = .5a_n$ 3, 1.5,

Multiply by .5 recursively.

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ 1, 3, 5, 7, 9

2. $a_n = n^2$ 1, 4, 9, 16, 25

3. $a_n = 2(3)^{n-1}$ 2, 6, 18, 54, 162

4. $a_1 = 3$; $a_{n+1} = a_n + 2.5$ 3, 5.5, 8, 10.5, 13

5. $a_1 = 3$; $a_{n+1} = .5a_n$ 3, 1.5, 0.75,

Multiply by .5 recursively.

Algebra 2 Class Worksheet #1 Unit 9

Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ 1, 3, 5, 7, 9

2. $a_n = n^2$ 1, 4, 9, 16, 25

3. $a_n = 2(3)^{n-1}$ 2, 6, 18, 54, 162

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5. $a_1 = 3$; $a_{n+1} = .5a_n$ — 3, 1.5, 0.75, 0.375,

Multiply by .5 recursively.

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5. $a_1 = 3$; $a_{n+1} = .5a_n$ 3, 1.5, 0.75, 0.375, 0.1875

Multiply by .5 recursively.

Algebra 2 Class Worksheet #1 Unit 9

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6. $a_1 = 10$; $a_{n+1} = a_n - 2$ ____

Algebra 2 Class Worksheet #1 Unit 9

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6. $a_1 = 10$; $a_{n+1} = a_n - 2$ — 10,

Subtract 2 recursively.

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Use the given formula to write the first 5 terms of each sequence.

1. $a_n = 2n - 1$ — 1, 3, 5, 7, 9
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6. $a_1 = 10$; $a_{n+1} = a_n - 2$ — 10, 8,

Subtract 2 recursively.

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Algebra 2   Class Worksheet #1   Unit 9

Write an explicit formula for each of the following sequences.

7. 3, 6, 9, 12, 15, 18, 21, … ______________________

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

9. 3, 9, 27, 81, 243, 729, … ______________________

Algebra 2 Class Worksheet #1 Unit 9

Write an explicit formula for each of the following sequences.

7. 3, 6, 9, 12, 15, 18, 21, … ______________________________

Algebra 2 Class Worksheet #1 Unit 9

Write an explicit formula for each of the following sequences.

7. 3, 6, 9, 12, 15, 18, 21, … ______________________________

Each term is a multiple of 3.

Algebra 2 Class Worksheet #1 Unit 9

Write an explicit formula for each of the following sequences.

7. 3, 6, 9, 12, 15, 18, 21, … ________________________

(3)(1) ,

Each term is a multiple of 3.

Algebra 2 Class Worksheet #1 Unit 9

Write an explicit formula for each of the following sequences.

7. 3, 6, 9, 12, 15, 18, 21, … ______________________________

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Write an explicit formula for each of the following sequences.

7. 3, 6, 9, 12, 15, 18, 21, … ____________________________

(3)(1) , (3)(2) ,

Each term is a multiple of 3.

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(3)(1) , (3)(2) , (3)(3) , (3)(4) , …

Each term is a multiple of 3.

Algebra 2 Class Worksheet #1 Unit 9

Write an explicit formula for each of the following sequences.

7. 3, 6, 9, 12, 15, 18, 21, … $a_n =$ ____________________

(3)(1) , (3)(2) , (3)(3) , (3)(4) , …

Each term is a multiple of 3.

Algebra 2 Class Worksheet #1 Unit 9

Write an explicit formula for each of the following sequences.

7. 3, 6, 9, 12, 15, 18, 21, … $a_n = 3n$

(3)(1) , (3)(2) , (3)(3) , (3)(4) , …

Each term is a multiple of 3.

Algebra 2 Class Worksheet #1 Unit 9

Write an explicit formula for each of the following sequences.

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Algebra 2 Class Worksheet #1 Unit 9

Write an explicit formula for each of the following sequences.

7. 3, 6, 9, 12, 15, 18, 21, … $a_n = 3n$

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

Algebra 2 Class Worksheet #1 Unit 9

Write an explicit formula for each of the following sequences.

7. 3, 6, 9, 12, 15, 18, 21, … $a_n = 3n$

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

Each term is 1 less than a perfect square.

Algebra 2 Class Worksheet #1 Unit 9

Write an explicit formula for each of the following sequences.

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$1^2 - 1$

Each term is 1 less than a perfect square.

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$1^2 - 1$, $2^2 - 1$

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$1^2 - 1 , 2^2 - 1 ,$

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$1^2 - 1$, $2^2 - 1$, $3^2 - 1$

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$1^2 - 1$, $2^2 - 1$, $3^2 - 1$, $4^2 - 1$

Each term is 1 less than a perfect square.

Algebra 2 Class Worksheet #1 Unit 9

Write an explicit formula for each of the following sequences.

7. 3, 6, 9, 12, 15, 18, 21, … $a_n = 3n$

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$1^2 - 1,\ 2^2 - 1,\ 3^2 - 1,\ 4^2 - 1,\ \ldots$

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Write an explicit formula for each of the following sequences.

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$1^2 - 1$, $2^2 - 1$, $3^2 - 1$, $4^2 - 1$, …

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Write an explicit formula for each of the following sequences.

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Each term is a power of 3.

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Write an explicit formula for each of the following sequences.

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3^1

Each term is a power of 3.

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Write an explicit formula for each of the following sequences.

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3^1 ,

Each term is a power of 3.

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9. 3, 9, 27, 81, 243, 729, … ____________

3^1 ,

Each term is a power of 3.

Algebra 2 Class Worksheet #1 Unit 9

Write an explicit formula for each of the following sequences.

7. 3, 6, 9, 12, 15, 18, 21, … $a_n = 3n$

8. 0, 3, 8, 15, 24, 35, 48, … $a_n = n^2 - 1$

9. 3, 9, 27, 81, 243, 729, … ______________

3^1, 3^2

Each term is a power of 3.

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Write an explicit formula for each of the following sequences.

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3^1 , 3^2 ,

Each term is a power of 3.

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3^1 , 3^2 ,

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$3^1, 3^2, 3^3$

Each term is a power of 3.

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9. 3, 9, 27, 81, 243, 729, … ____________

3^1 , 3^2 , 3^3 ,

Each term is a power of 3.

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11. 3, 6, 12, 24, 48, 96, 192, … $a_1 = 3$; $a_{n+1} = 2a_n$

12. 0, 1, 3, 7, 15, 31, 63, 127, … $a_1 = 0$;

The first term is 0. Then, multiply by 2 and add 1 recursively.

Algebra 2 Class Worksheet #1 Unit 9

Write an explicit formula for each of the following sequences.

7. 3, 6, 9, 12, 15, 18, 21, … $a_n = 3n$

8. 0, 3, 8, 15, 24, 35, 48, … $a_n = n^2 - 1$

9. 3, 9, 27, 81, 243, 729, … $a_n = 3^n$

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