

MATHEMATICS

Quarter 2 - Module 8

Determine the Next Term/s in Increasing or Decreasing Patterns



MATHEMATICS - Grade 2
Quarter 2 - Module 8 Determine the Next Term/s in Increasing or Decreasing
Patterns
Self-Learning Module (SLM)
MATATAG Curriculum
First Edition, 2025

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Introductory Message

This Self-Learning Module (SLM) is prepared so that you, our dear learners, can continue your studies and learn while at home. Activities, questions, directions, exercises, and discussions are clearly stated for you to understand each lesson.

Each SLM is composed of different parts. Each part shall guide you step-by-step as you discover and understand the lesson prepared for you.

A Pre-test is provided to measure your prior knowledge on lessons in each SLM. This will tell if you need to proceed on completing this module, or if you need to ask your facilitator or your teacher's assistance for better understanding of the lesson. At the end of each module, you need to answer the post-test to self-check your learning. Answer keys are provided for each activity and test. We trust that you will be honest in using these.

In addition to the material in the main text, Notes to the Teachers are also provided to the facilitators and parents for strategies and reminders on how they can best help you on your home-based learning.

Please use this module with care. Do not put unnecessary marks on any part of this SLM. Use a separate sheet of paper in answering the exercises and tests. Read carefully the instructions before performing each task.

If you have any questions in using this SLM or any difficulty in doing the tasks in this module, do not hesitate to consult your teachers or facilitator.

Thank you.

For the learner

Welcome to the Mathematics - Grade 2 Self-Learning Module (SLM) on Determine the Next Term/s in Increasing or Decreasing Patterns!

In this learning resource, you will have the opportunity to enjoy and successfully achieve relevant competencies at your own pace.

This module offers fun and meaningful opportunities for both guided and independent learning. You will engage with the material and become an active participant in your learning journey.

This module has the following parts and corresponding icons:



What I Need to Know

This gives you an idea of the skills or competencies you are expected to learn in the module.



What I Know

This part includes an activity that aims to check what you already know about the lesson to take. If you get all the answers correctly, you may decide to skip this part.



What's In

This is a brief drill or review to help you link the current lesson with the previous one.



What's New

In this portion, the new lesson is introduced to you in various ways such as through a story, a song, a poem, a problem opener, an activity or a situation.



What is It

This section provides a brief discussion of the lesson. This aims to help you discover and understand new concepts and skills.



What's More

This comprises activities for independent practice to concretize your understanding and skills about the topic. You may check the answers to the exercises using the Answer Key at the end of the module.

**What I Have Learned**

This includes questions or blank sentence/ paragraph to be filled in to process what you learned from the lesson.

**What I Can Do**

This section provides an activity which will help you transfer your new knowledge or skill into real life situations or events.

**Assessment**

This is a task which aims to evaluate your level of mastery in achieving the learning competency.

**Additional Activities**

In this portion, another activity is given to you to enrich your knowledge or skill of the lesson learned. It also ensures retention of learned concepts.

Answer Key

This contains answers to all activities in the module.

At the end of this module, you will also find:

References

This is a list of all sources used in developing this module.

The following are some reminders in using this module:

1. Use the module with care. Avoid unnecessary mark/s on any part of the module. Use a separate sheet of paper in answering the exercises.
2. Answer *What I Know* before moving on to the other activities included in the module.
3. Carefully read the instructions before doing each task.
4. Observe honesty and integrity in doing the tasks and in checking your answers.
5. Finish the task at hand before proceeding to the next.
6. Return this module to your teacher/facilitator once you are through with it.

If you encounter any difficulty in doing the tasks in this module, consult your teacher or facilitator. Always bear in mind that you are not alone. We hope that through this material, you will experience meaningful learning and gain a deep understanding of the relevant competencies.

For the facilitator

Welcome to the (Mathematics Grade 2) Self-Learning Module on (Determine the Next Term in Increasing and Decreasing Patterns)!

The Curriculum Implementation Division (CID) through the Learning Resource Management Section (LRMS) launched this module in cooperation with the Division's Teacher Developers, Learning Resource Evaluators (LREs), Information and Technology Officer, and subject matter experts in Mathematics and English. This has been especially developed, quality-assured, and validated to enable you to help the learners overcome their educational obstacles—personal, social, and economic—while meeting the standards outlined in the MATATAG Curriculum.

This learning resource hopes to engage the learners in guided and independent learning activities. It further aims to help them acquire the needed 21st century skills while taking into consideration their needs and circumstances.

As a facilitator, you are expected to orient the learners on how to use this module. You also need to keep track of their progress while allowing them to manage their learning. In addition, you are enjoined to encourage and assist the learners as they do the tasks contained in the module.

MATHEMATICS 2

Quarter 2 - Module 8

Determine the Next Term/s in
Increasing or Decreasing Patterns



What I Need to Know

This module was designed and written with you in mind. It is here to help you master the determine the next term/s in increasing or decreasing patterns, e.g., numbers, letters and rhythmic properties, visual elements in arts, and repetitions.

The scope of this module permits it to be used in many different learning situations. The language used recognizes the diverse vocabulary level of students. The lessons are arranged to follow the standard sequence of the course. But the order in which you read them can be changed to correspond with the textbook you are now using.

The module is divided into two lessons, namely:

- A. Determine the next term/s in increasing or decreasing patterns, e.g., numbers, letters and rhythmic properties, visual elements in arts, and repetitions.
- B. Create increasing or decreasing patterns.

After going through this module, you are expected to:

- a) determine the next term/s in increasing or decreasing patterns,
- b) create increasing or decreasing patterns.

Are you ready to begin? Let us check what you know about determine the next term in increasing and decreasing.

Lesson 1 - Determine the Next Term in Increasing or Decreasing Patterns

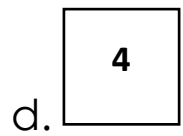
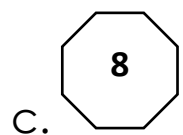
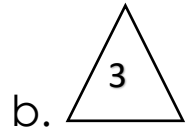
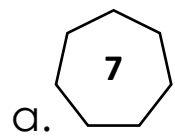
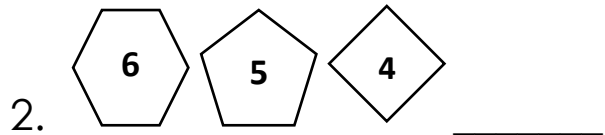
In this lesson, you will learn how to determine the next term in increasing or decreasing pattern. Are you excited to learn? Let's go ahead and discover.



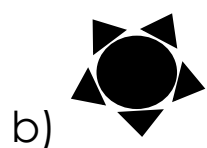
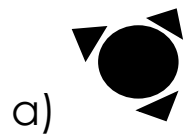
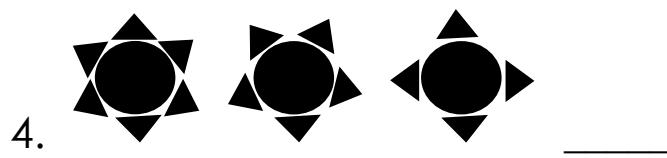
What I Know

Directions: Determine the next term if increasing or decreasing to generate the following pattern. Choose the correct answer from the choices.





- a) 5E
- b) 6F
- c) 7G
- d) 8H



5. 10th, 9th, 8th, 7th, 6th, 5th

- a) 2nd
- b) 4th
- c) 3rd
- d) 11th

Please check your answers against the answer key on page 13.



What's In

Directions: Identify the arrangement of the object inside the rectangle. Write the word Increasing or Decreasing on the blank.

1.

○ ○ ○ ○ ○	○ ○ ○ ○	○ ○ ○	○ ○	○
--------------	------------	----------	-----	---

2.

♥ ♥ ♥	♥ ♥ ♥ ♥	♥ ♥ ♥ ♥ ♥	♥ ♥ ♥ ♥ ♥ ♥
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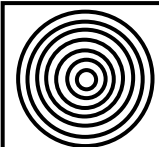
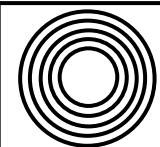
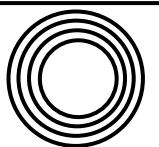
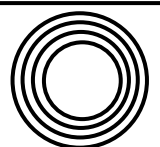
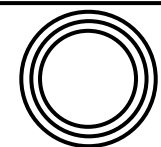
3.

1 2 3 4 5 6	7 8 9 10 11 12	13 14 15 17 18 19	21 22 23 24 25 26	27 28 29 30 21 32
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4.

A B C	F G H	K L M	P Q R	U V W
D E	I J	N O	S T	X Y

5.

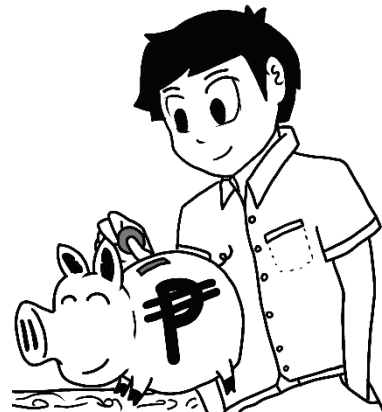
				
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What's New

Directions: Read and understand the story. Show your solution in your paper.

Pablo plan to buy a new pair of shoes out of his weekly allowance. On Mondays, he saves ₱ 10.00. On Tuesdays he saves ₱ 15.00. On Wednesdays he saves ₱ 20.00. On Thursdays, he saves ₱ 25.00. How much do you think will he save on Fridays?



1. Who plans to buy a new pair of shoes?
2. How much will he save on Fridays?
3. Is saving money important? Why?

You are doing well. Keep going!



What is It

Now, let's discuss about the given word problem.

Here is the list of Pablo's savings on weekdays:

Monday – ₱ 10

Tuesday – ₱15

Wednesday – ₱ 20

Thursday – ₱ 25

Friday – ₱ N

10, 15, 20, 25, _____

Now, look at the pattern of each number.

10, 15, 20, 25, 30

The numbers are arranged in an increasing order.

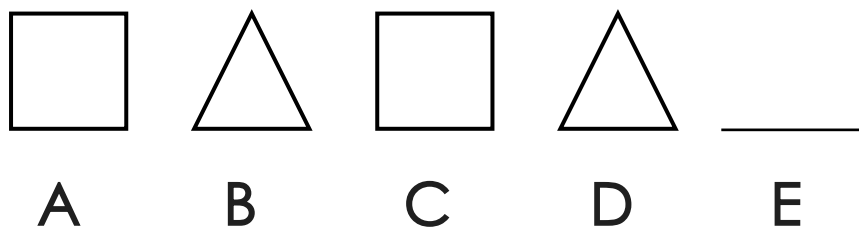
Here's another example:

30 25 20 15 10

The numbers are arranged in a decreasing order.

We can also use the shapes and letters to determine the next term.

Example:



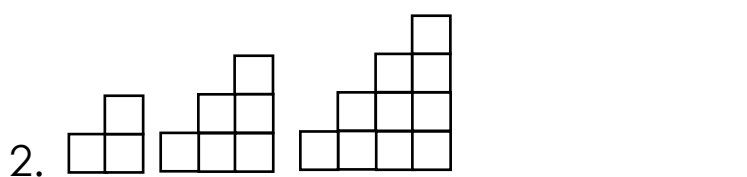
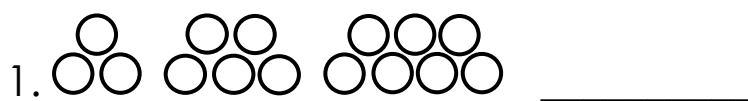
Congratulations! You are doing a good job and you've reached this far. Now, try to do the independent activities that follow.



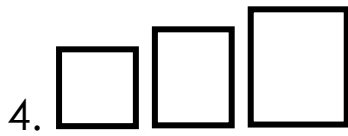
What's More

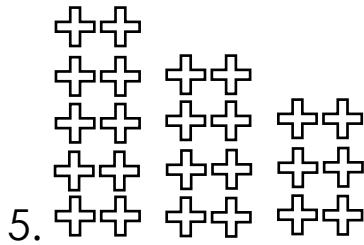
Let's try the activities below.

Directions: Draw the next term that will form the following increasing and decreasing pattern in the space provided.











What I have learned

Directions: Fill in the blanks with the correct answer.
Choose your answer from the rectangle below.

pattern	increasing	ending
decreasing	order	

A _____ is a sequenced set of numbers, letters, shapes, colors and images arranged according to a rule. In determining the next term in a pattern, we need to know its _____, whether it is _____ or _____. We must remember what comes first or what will be the _____ figure in a pattern.

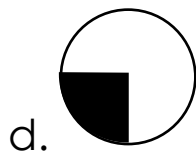
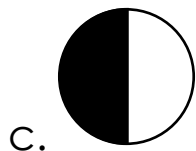
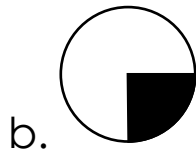
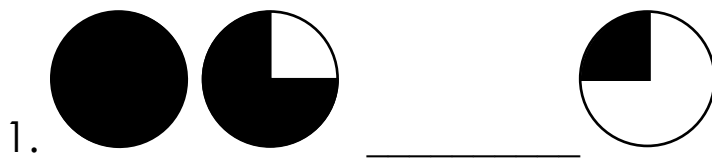
Excellent! You are almost done. Keep going!



What I can do

You have reached this far. Good job! Now let us try some other patterns.

Directions: Fill in the blanks with the correct figure for the pattern.



2. Rr Ss Tt _____ Vv

a. Vv


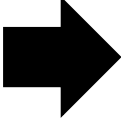
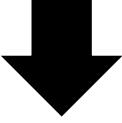
b. Uu

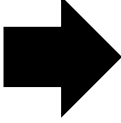
c. Ww

d. Xx

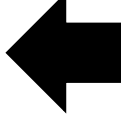
3. _____ 200 300 400

- a. 10
- b. 100
- c. 1,000
- d. 10,000

4.    _____

a. 

b. 

c. 

d. 

5.



a.



b.



c.



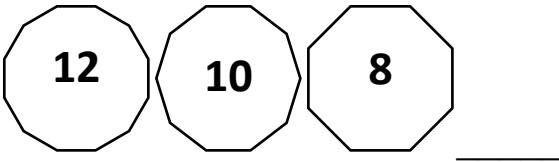
d.

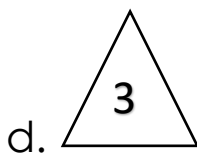
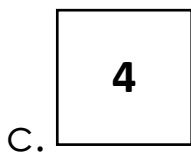
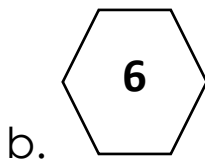
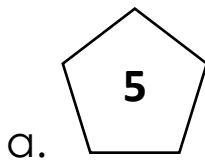




Assessment

Directions: Identify the missing number or figure to form the following pattern. Write the answer on the answer sheet.

1. 



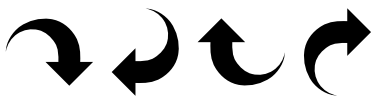
2. 11K, 12L, 13M, 14N _____

a. 9I


b. 10J

c. 15O

d. 16P

3.  _____

a. 

b. 

c. 

d. 

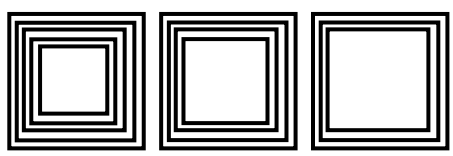
4. A1, B3, C5, D7, _____

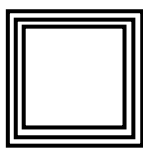
a. E9

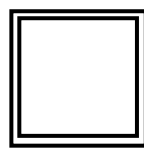
b. e9

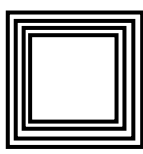
c. E8

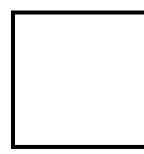
d. e8

5.  _____

a. 

c. 

b. 

d. 

You are almost done with this lesson. There is only one activity left. Keep going!



Additional Activities

Directions: Draw a repeating pattern using shapes or numbers in each number. Draw your answer on the blanks provided.

1.  _____

2.  _____

3.  _____

4.  _____

5.  _____

Lesson 2-Create an Increasing or Decreasing Pattern

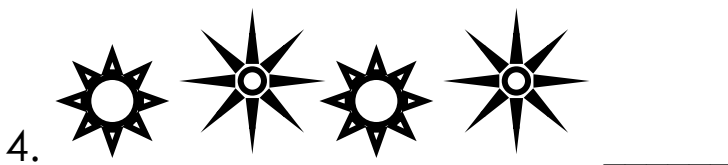
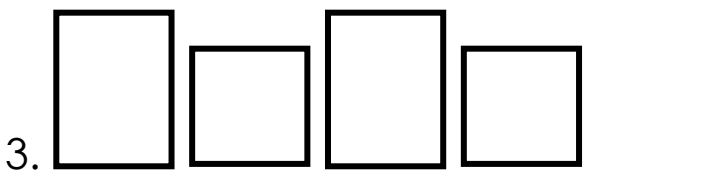
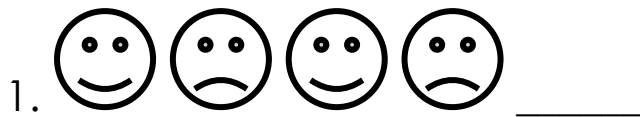
In this lesson, you will learn how to create increasing or decreasing patterns. Are you excited to learn? Let's go ahead and discover.

A **pattern** is a repeated or recurring arrangement of elements, forms or events.



What I Know

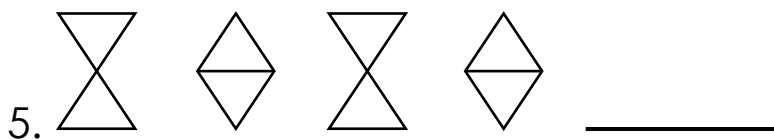
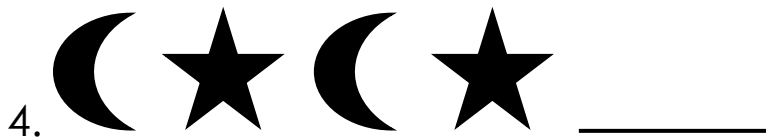
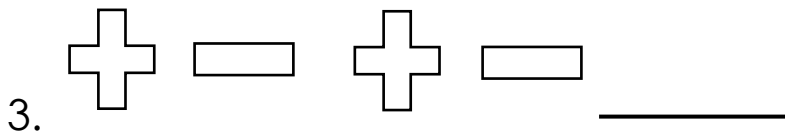
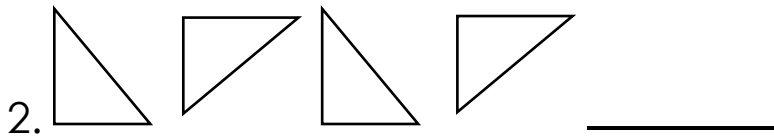
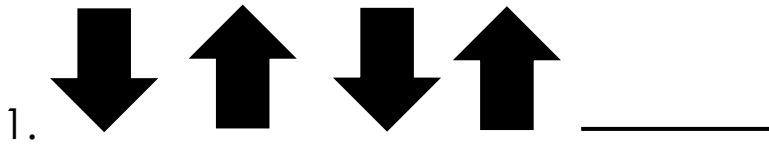
Directions: Draw the next pattern on the blank provided.





What's In

Directions: Draw the next object to complete the pattern.





What's New

Directions: Read and understand the story.

Anton's Favorite Toy



Anton likes to play toy train and toy cars. He is not getting tired playing with the toys. One day, he keeps his toy cars in a cabinet. He put the toys according to color. The first in the row is a red toy car, then blue toy car, green toy car, black toy car and last is the yellow toy car. Anton is happy to see his toys in a cabinet.

Directions: Answer the questions.

1. Who has toy cars?
2. What are the colors of the toys?
3. What did Anton do with his toy cars?
4. What color is last in a row?
5. How did Anton feel after he keep the toys in a cabinet?

You are doing well. Keep going!



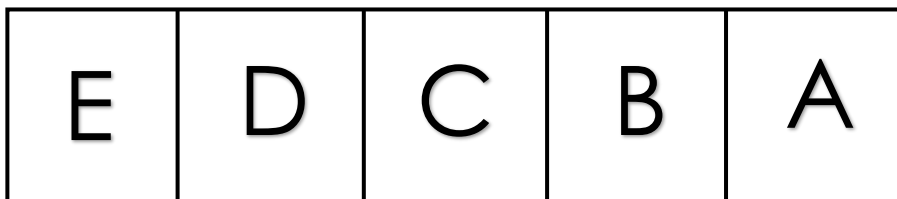
What is It

To create an increasing or decreasing pattern, you must follow a systematic approach where element such as numbers, shapes, or other objects change in a regular way either increasing or decreasing.

Example of an increasing pattern.

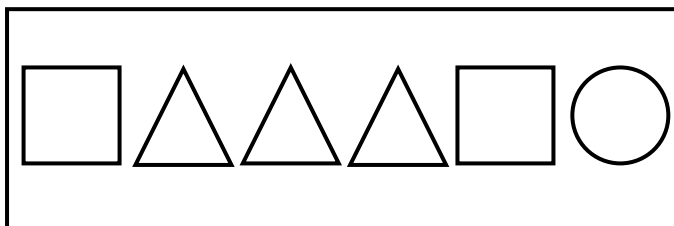


Example of a decreasing pattern using letters.



What's More

Directions: Create an increasing or decreasing pattern using shapes, numbers, and letters. Draw your answer inside the box at the right.



1. Decreasing Pattern

6 8 10 2 4

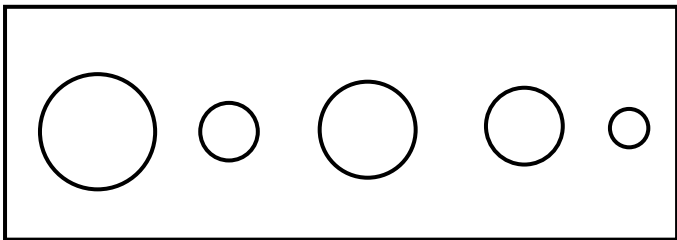
2. Increasing Pattern
____ _

40 10 20 30 50

3. Decreasing Pattern
____ _

Z V X Y W

4. Increasing Pattern
____ _



5. Decreasing Pattern
____ _

Congratulations! You are doing a good job and you've reached this far. Now, try to do the independent activities that follow.



What I have learned

Directions: Fill in the blanks with the correct word to complete the statement. Choose your answer from the rectangle below.

create	element	number
increasing	decreasing	

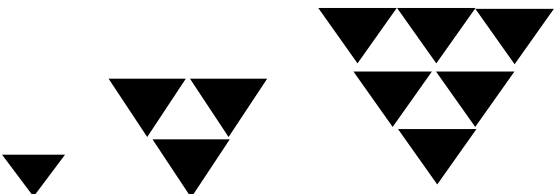
To 1. _____ an increasing or 2. _____ pattern, you must follow a systematic approach where 3. _____ such as 4. _____, shapes, or other objects change in a regular way either 5. _____ or decreasing.

Excellent! You are almost done. Keep going!

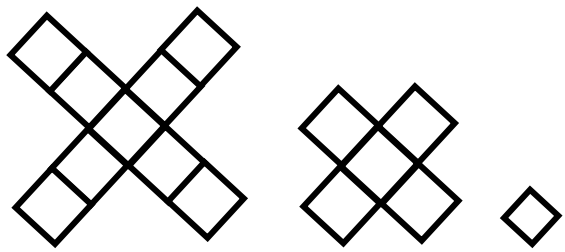


What I can do

Directions: Identify if the pattern is increasing or decreasing. Write the correct answer on the blank.

1.  _____

2.  _____

3.  _____

4. 15 22 26 43 _____

5. B D F H _____



Assessment

Directions: Put a check (/) inside the box if the pattern is increasing and (X) if it is decreasing.

1. 10 15 20 25 30 35 40 45 50 55

Increasing Decreasing

2. 45 42 39 36 33 30 27 24 21 18

Increasing Decreasing

3. A B B C C C D D D D

Increasing Decreasing

4. 

Increasing Decreasing

5. Z Z Z Z Y Y Y X X W

Increasing Decreasing

There is only one more activity to do. You are doing well.
Keep going!



Additional Activities

Directions: Create an increasing or decreasing patterns using numbers, letters, shapes, and other objects. Draw your answer inside the rectangle.

1. Increasing

2. Decreasing


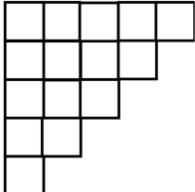



3. Increasing

4. Decreasing






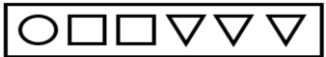
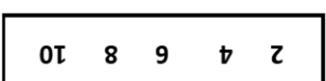
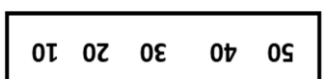
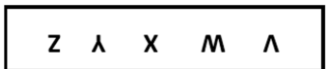





5. Increasing

Answer Key

Lesson 1

<p>What I know</p> <p>1. a 2. b 3. a 4. a 5. b</p> <p>What's In</p> <p>1. Decreasing 2. Increasing 3. Increasing 4. Increasing 5. Decreasing</p>	<p>What's More</p> <p>Activity 1</p> <p>1. </p> <p>2. </p> <p>3. </p> <p>4. </p> <p>5. </p>	<p>What I Can do</p> <p>1. c 2. b 3. b 4. c 5. d</p> <p>What I Have Learned</p> <p>1. pattern 2. increasing 3. decreasing 4. ending 5. order</p> <p>Assessment</p> <p>1. b 2. c 3. a 4. b 5. c</p>
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Lesson 2

<p>What's in</p> <p>1. </p> <p>2. </p> <p>3. </p> <p>4. </p> <p>5. </p>	<p>What's More</p> <p>1. </p> <p>2. </p> <p>3. </p> <p>4. </p> <p>5. </p> <p>What I Have Learned</p> <p>1. create 2. Decreasing 3. Element 4. Number 5. Increasing</p>	<p>What can I do</p> <p>1. Increasing 2. Decreasing 3. Decreasing 4. Increasing 5. Increasing</p> <p>Assessment</p> <p>1. Increasing 2. Decreasing 3. Increasing 4. Decreasing 5. Decreasing</p>
<p>What I know</p> <p>1. </p> <p>2. </p> <p>3. </p> <p>4. </p> <p>5. 10E</p>		

References

- F, Garcia Ralyn P. Margen Jorna May. 2021. "Mathematics 3 Quater 3 Determine the missing term in a pattern." *Self-learning Module (SLM)*. Regional Center, Brgy. Carpenter Hill, City of Koronadal: Soccsksargen Region.
- G., Magalang Jen – Jen. 2020. "Arts 2: Quarter 3: Creating a Pattern." *Self-Learning Module (SLM)*. Matalino St., Government Center, Maimpis, City of San Fernando , City of Koronadal: Department of Education - Region III.

DISCLAIMER

This Self-learning Module (SLM) in **MATHEMATICS 2 Quarter 2 Module 8** titled "**Determine the Next Term/s in Increasing or Decreasing Patterns**" was developed by SDO Tacurong with the primary objective of preparing for and addressing the demands of the MATATAG Curriculum. Contents of this module were based on DepEd's Learning Competencies anchored on the MATATAG Curriculum. This is a supplementary material to be used by all learners of Tacurong City in all public schools beginning SY 2024-2025. The process of LR development was observed in the production of this module. This is version **1.0**. We highly encourage feedback, comments, and recommendations.

For inquiries or feedback, please write or call:

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