

MATHEMATICS

Quarter 1 - Module 1

Represent and describe circles, half-circles and quarter-circles



MATHEMATICS - Grade 2

Quarter 1 - Module 1 Represent and describe circles, half-circles and quarter-circles

Self-Learning Module (SLM)

MATATAG Curriculum

First Edition, 2024

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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.

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 Representing and describing circles, half-circles and quarter-circles!

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 instruction 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 Representing and describing circles, half-circles and quarter-circles!

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

Quarter 1 - Module 1

Represent and describe circles, half-circles and quarter-circles



What I Need to Know

This module was made with the intention of enabling teachers, parents, and learners to collaborate in order to help the students' understanding of the subject of Mathematics. It is crucial to remember that learning modules are valuable because they facilitate better course content, provide flexible learning options, raise student engagement, and streamline the learning process. Students should carefully read the lesson and provide accurate and precise answers to all of the questions. Students will be able to learn how to solve subtraction problems in this module.

This module is composed of two lessons:

- **Lesson 1** – Representing and describing circles, half-circles and quarter-circles

Objective:

At the end of this module, you are expected to:

- Represent and describe circles, half-circles and quarter-circles

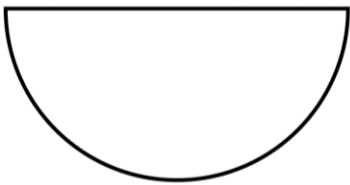


What I Know

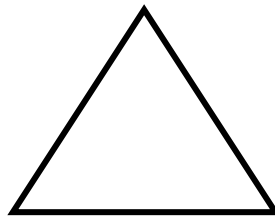
Before we start learning about circles, let us talk about what you already know.

Directions: Write **HC** if the shape is a half-circle and **QC** if it is a quarter-circle.

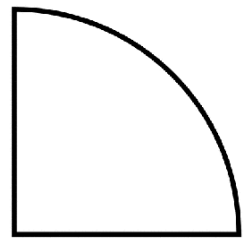
1.



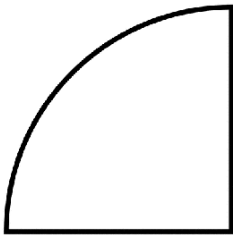
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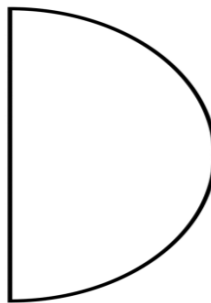
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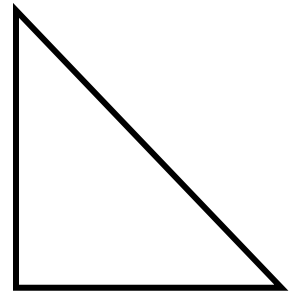
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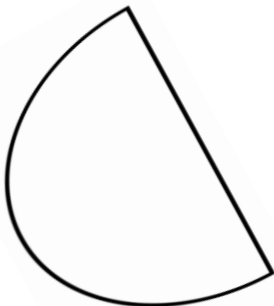
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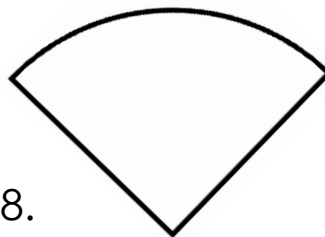
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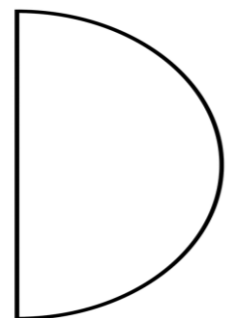
7.



8.



9.



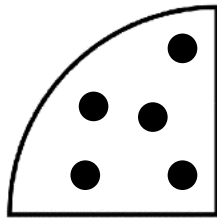
Lesson 1 – Representing and describing circle



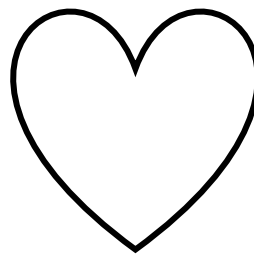
What's In

Can you identify half-circles from quarter-circles? Let us start looking at these shapes.

Directions: Write the letter of the object that shows a half-circle and quarter-circle.



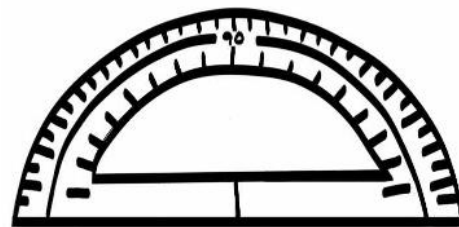
A



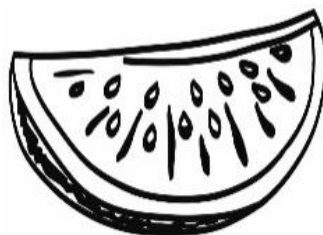
B



C



D



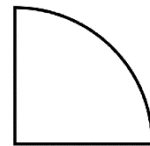
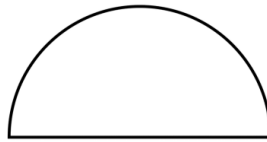
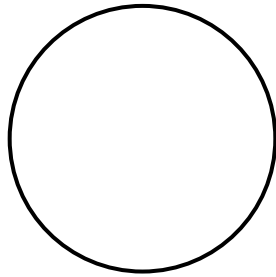
E



What's New

Hello kids!

Are you familiar with the following figures?

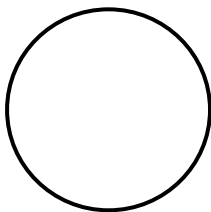


Have you seen figures like these before?

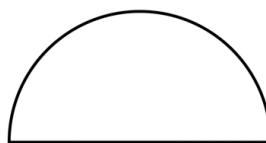


What is It

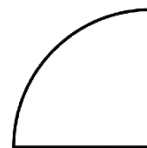
Looking the figures drawn above, they are classified as:



circle



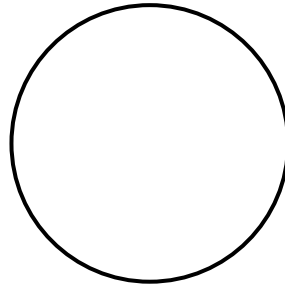
half-circle



quarter-circle

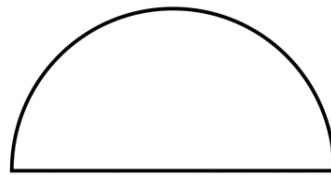
In this lesson, you will learn about circle, half-circle and quarter-circle.

This is a circle.

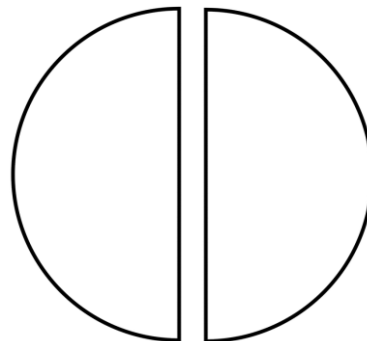
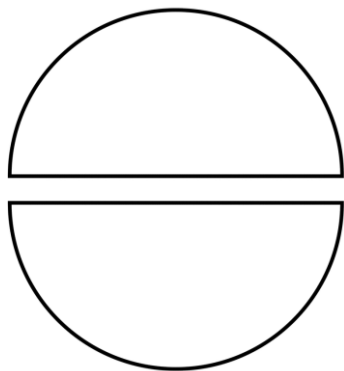


A **circle** is a round-shaped figure that has no corners or edges.

This is a half-circle.

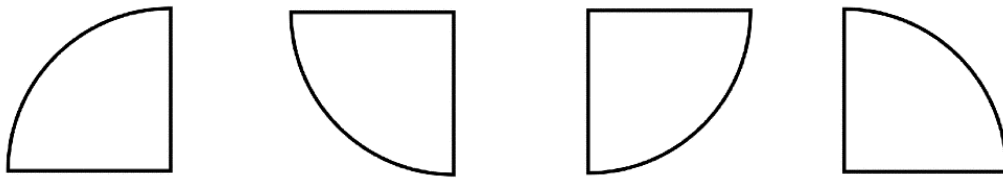


This is also a half-circle.

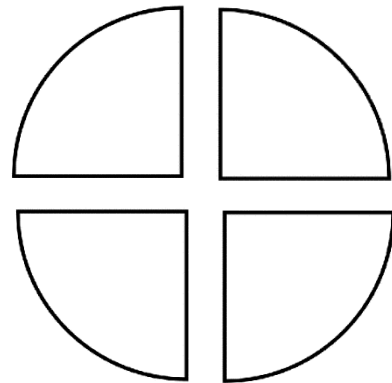


A **half-circle** is also a semicircle. “Semi” means half. There are 2 half-circles in a circle.

The next figures are examples of a quarter-circle.



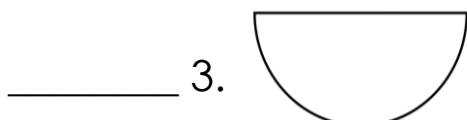
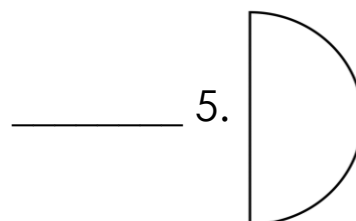
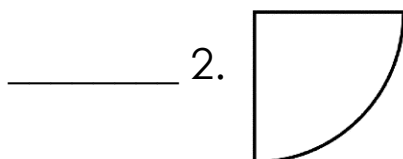
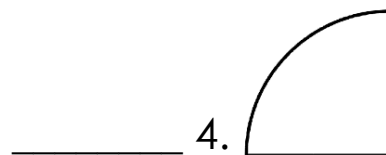
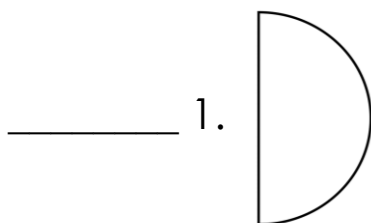
A **quarter-circle** is one-fourth of a circle. "Quarter" means a fourth. There are 4 quarter-circles in a circle.



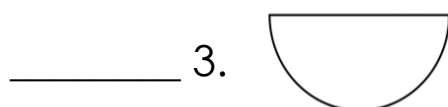
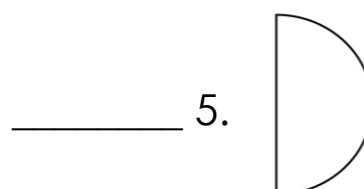
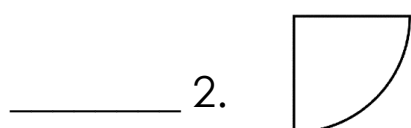
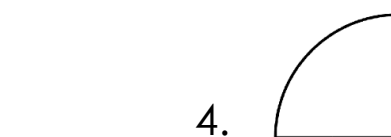
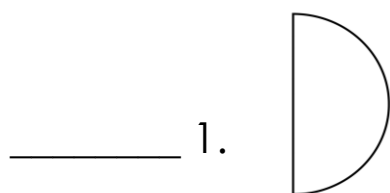
What's More

Directions:

A. Which of the figures below are **half-circles**? Put a check (/) on the number if it is a half-circle and (X) if it is not.



B. Which of the figures below are **quarter-circles**? Put a check (/) on the number if it is a quarter-circle and (X) if it is not.



What I have learned

Now that you have learned about circles, let us review!

Directions: Choose the correct word from the box to complete the sentence.

- ✓ A circle is a _____-shaped figure that has no corners or edges.
- ✓ A half-circle is also a _____.
- ✓ There are ____ half-circles in a circle.
- ✓ A _____ circle is one-fourth of a circle.
- ✓ There are ____ quarters in a circle.

semicircle

4

round

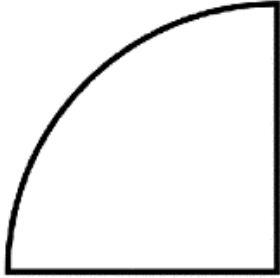
2

quarter

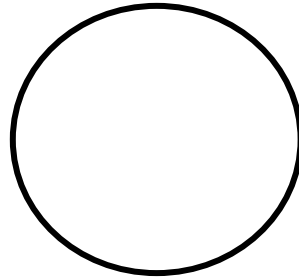


What I can do

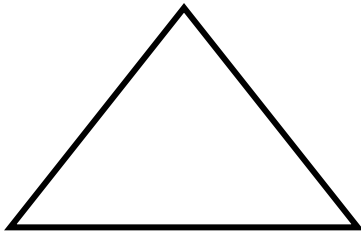
Directions: Write the letter of the figure that shows images of half-circles and quarter-circles.



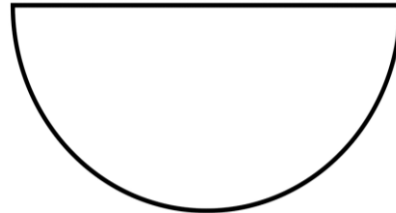
A



B



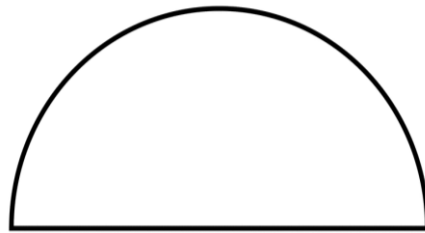
C



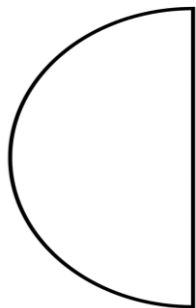
D



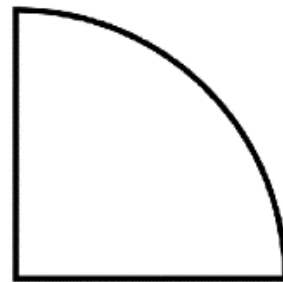
E



F



G

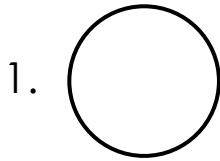


H

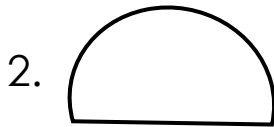


Assessment

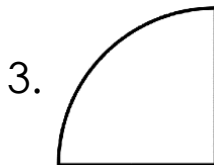
I. Write the letter of the correct answer.



- a. circle
- b. half-circle
- c. quarter-circle



- a. circle
- b. half-circle
- c. quarter-circle



- a. circle
- b. half-circle
- c. quarter-circle

II. Write **True** if the statement is correct and **False** if the statement is incorrect.

- _____ 1) A circle has no corners.
- _____ 2) A circle is round.
- _____ 3) Half-circle is a part of a circle.
- _____ 4) A quarter-circle is also known as semicircle.
- _____ 5) There are two quarter-circles in a circle.




Additional Activities


Directions: Draw 1 circle, 2 half-circles, and 2 quarter-circles in your notebook.


Answer Key

Assessment

I. Encircle the letter of the correct answer.

1.  a. circle
b. half-circle
c. quarter circle

2.  a. circle
b. half-circle
c. quarter circle

3.  a. circle
b. half-circle
c. quarter circle

II. Write **True** in the blank if the statement is correct and **False** if the statement is incorrect.

1) A circle has no corners. **True**

2) A circle is round. **True**

3) Half-circle is a part of a circle. **True**

4) A quarter circle is also known as semicircle. **False**

5) There are two quarter circles in a circle. **False**

What I have learned

Choose the correct word from the box to fill in the blanks.

A circle is a **round**-shaped figure that has no corners or edges.

A half-circle is also a **semicircle**.

There are **2** half-circles in a circle.

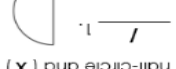
A **quarter**-circle is one-fourth of a circle.

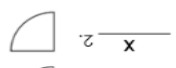
There are **4** quarters in a circle.

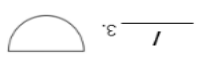
semicircle
round
quarter

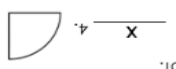
What's More

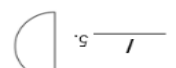
A. Which of the figures below are **half-circles**? Put a check (✓) on the blank before the number if it is a half-circle and (X) if it is not.

1.  ✓

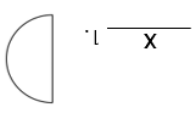
2.  X

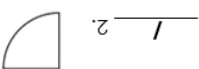
3.  ✓

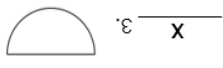
4.  X

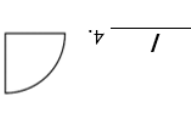
5.  X

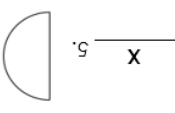
B. Which of the figures below are **quarter circles**? Put a check (✓) on the blank before the number if it is a quarter circle and (X) if it is not.

1.  X

2.  ✓

3.  X

4.  ✓

5.  X


What I can do


Directions: Write the letter of the figure that shows images of half-circles and quarter-circles.


1) A
2) D
3) F
4) G
5) H

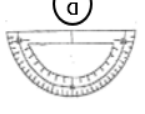
What's In


Encircle the letter of the object that shows a half and quarter circle.

A.  A

B.  B

C.  C

D.  D

E.  E

What I Know

Directions: Write HC if the shape is a half-circle and QC if it is a quarter-circle.

1. HC
2.
3. QC
4. QC
5. HC
6.
7. HC
8. QC
9. HC

References

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DISCLAIMER

This Self-learning Module (SLM) in **MATHEMATICS 2- Quarter 1 - Module 1** titled **"Represent and describe circles, half-circles and quarter-circles"** 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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