

MATHEMATICS

Quarter 4 - Module 2

Represent and Identify Similar Fractions
Using Group of Objects, Fraction Charts,
Fraction Tiles and Number Line



MATHEMATICS - Grade 2

Quarter 4 - Module 2 Represent and Identify Similar Fractions Using Group of Objects, Fraction Charts, Fraction Tiles and Number Line

Self-Learning Module (SLM)

MATATAG Curriculum

First Edition, 2025

Republic Act 8293, section 176 states that: No copyright shall subsist in any work of the Government of the Philippines. However, prior approval of the government agency or office wherein the work is created shall be necessary for exploitation of such work for profit. Such agency or office may, among other things, impose as a condition the payment of royalties.

Borrowed materials (i.e., songs, stories, poems, pictures, photos, brand names, trademarks, etc.) included in this module are owned by their respective copyright holders. Every effort has been exerted to locate and seek permission to use these materials from their respective copyright owners. The publisher and authors do not represent nor claim ownership over them.

Development Team of the Module

Writer: Farley G. Tolentino

Editor: Brilin A. Adalin

Reviewer: Rona L. Bred

Illustrator: Farley G. Tolentino

Layout Artist: Leonora R. Po

Art Designer: Julius Cesar D. Meneses

Management Team:

Gildo G. Mosqueda, CEO VI - Schools Division Superintendent

Gilbert B. Barrera, CESE - Assistant Schools Division Superintendent

Arlene Rosa G. Arquiza - Chief ES, Curriculum Implementation Division

Ivy P. Lamintao - Education Program Supervisor, LRMS

Rona L. Bred - Education Program Supervisor, Mathematics

Joey M. Lozano - Information Technology Officer I

Leonora R. Po - Project Development Officer II, LRMS

Delia P. Eliarda - Librarian II

**Printed in the Philippines by
Schools Division Office of Tacurong City**

Office Address: Alunan Highway, Poblacion, Tacurong City 9800

Telephone Numbers: 09190656425/064-562-4880

E-mail Address: tacurong.city@deped.gov.ph

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 Representing and Identifying Similar Fractions Using Group of Object, Fraction Charts, Fraction Tile and Number Line!

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 (SLM) on Representing and Identifying Similar Fractions Using Group of Object, Fraction Charts, Fraction Tile and Number Line!

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 4 - Module 2

Represent and Identify Similar Fractions
Using Group of Objects, Fraction
Charts, Fraction Tiles and Number Line





What I Need to Know

Hi, mathletes! In this module, you will gain an understanding of representing and identifying similar fractions using group of objects, fraction charts, fraction tiles and number line. Your ability to learn the concepts and keep up with the tasks will depend to a large extent on your willingness to learn. So, are you ready?

After going through this module, you are expected to:

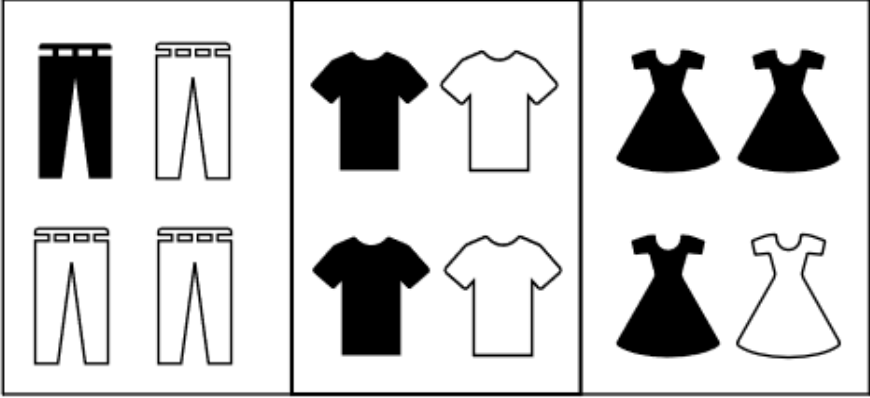
- Represent and identify similar fractions with denominators 2,3,4,5,6, and 8 using group of objects, fraction charts, fraction tiles and number line.



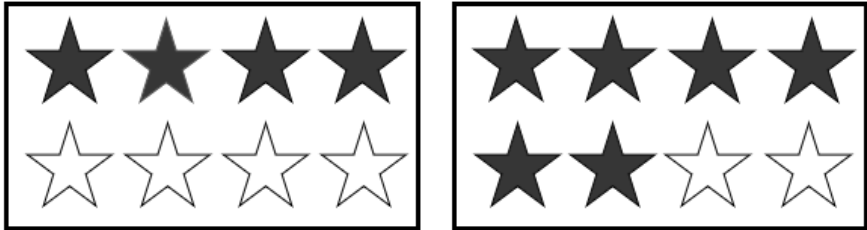
What I Know

Alright kids! Let's get started and try to answer this. Are you ready?

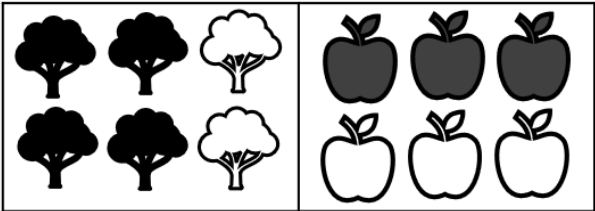
Directions: Identify similar fractions of the shaded parts.

1. 

a. $\frac{2}{4}, \frac{3}{4}, \frac{5}{4}$ b. $\frac{1}{4}, \frac{2}{4}, \frac{3}{4}$ c. $\frac{1}{4}, \frac{3}{4}, \frac{5}{4}$ d. $\frac{1}{2}, \frac{1}{3}, \frac{1}{4}$

2. 

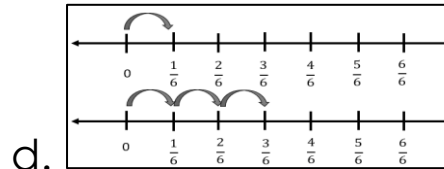
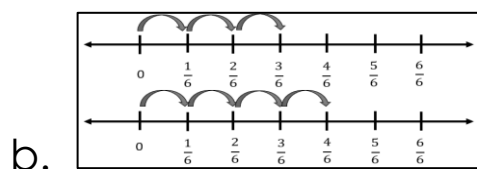
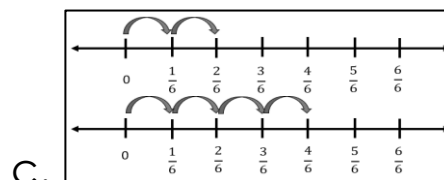
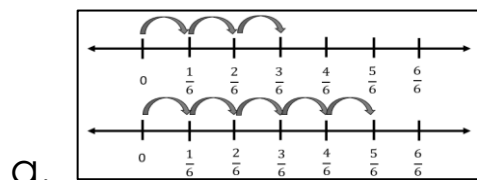
a. $\frac{2}{8}, \frac{5}{8}$ b. $\frac{3}{8}, \frac{6}{8}$ c. $\frac{1}{8}, \frac{4}{8}$ d. $\frac{4}{8}, \frac{6}{8}$

3. 

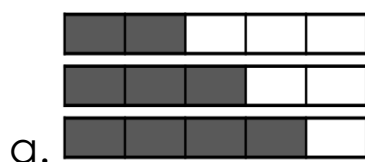
a. $\frac{2}{6}, \frac{5}{6}$ b. $\frac{4}{8}, \frac{3}{8}$ c. $\frac{3}{6}, \frac{5}{6}$ d. $\frac{4}{6}, \frac{3}{6}$

Directions: Represent and identify the given similar fractions.

4. $\frac{2}{6}, \frac{4}{6}$



5. $\frac{1}{5}, \frac{3}{5}, \frac{4}{5}$



Lesson 1 - Representing and Identifying Similar Fractions Using Group of Objects

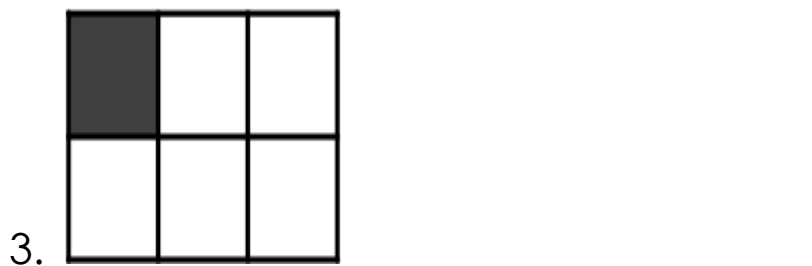
Hi kids, a pleasant day to start with a module! Hope you have fun and enjoy our activities.



What's In

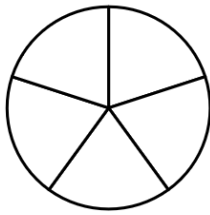
Let's take a look at what we have learned before! Try to answer this. Have Fun!

Directions: Identify the shaded parts. Write your answer on the space provided.



Directions: Shade the given fractions.

4. $\frac{1}{5}$



5. $\frac{1}{8}$



What's New

Amazing! You did a good job. Let us start learning the new idea with the help of this story problem.

Read and understand the story problem.

Fatima and Mariam are twin sisters. On their birthday, they prepared 3 different balloons. $\frac{3}{8}$ is with star-design, $\frac{4}{8}$ is with heart-design, and $\frac{1}{8}$ is with stripe-design. How many balloons are there in all?



Who are twin sisters? _____

How many balloons with star-design? _____

How many balloons with heart-design? _____

How many balloons with stripe-design? _____

What is asked in the problem? _____



What is It

Today, you are going to learn about representing fractions using group of objects.

Fractions is a part of a whole or collection. A fraction has two parts: the numerator and the denominator. The number on the top is called the **numerator**, and the number on the bottom is called the **denominator**. Fraction can be represented by the use of regions, sets and segments.

Study the figure below:

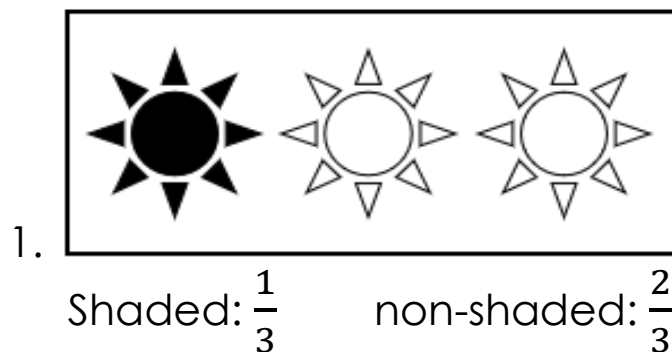


- How many balloons are there in a figure? It represents the denominator. **8 balloons**

- Of these balloons, how many with a star design, heart design, and stripe design? It represents the numerator. *The balloons with star design are 3, with heart design is 4, and with stripe design is 1*
- So, three-eighths, four-eighths, and one-eight are similar fractions.

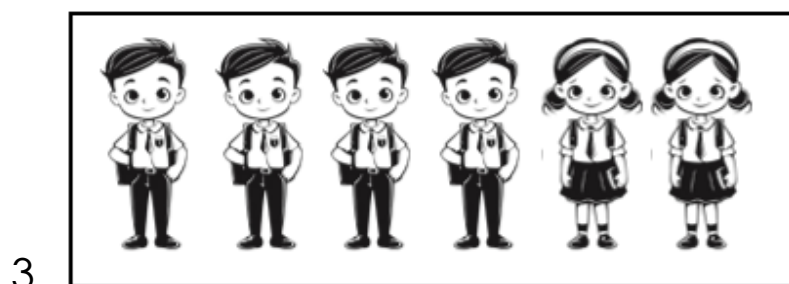
Similar Fractions are fractions with the same denominators.

A. Representing similar fractions using shaded parts



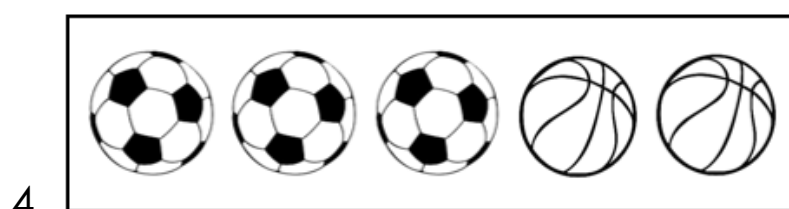
So, the shaded parts and the non-shaded are examples of similar fractions.

B. Representing similar fractions using sets



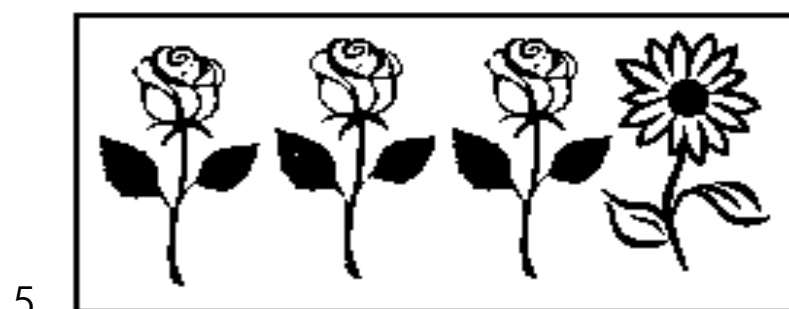
boys: $\frac{4}{6}$

girls: $\frac{2}{6}$



Soccer ball: $\frac{3}{5}$

basketball: $\frac{2}{5}$



Roses: $\frac{3}{4}$

Sunflower: $\frac{1}{4}$


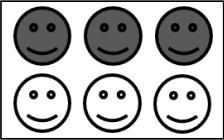
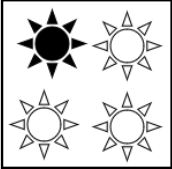
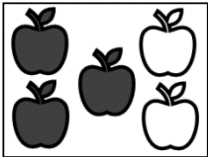
So, the Number of boys and girls, soccer ball and basketball ball, and roses and sunflower are examples of similar fraction. They are similar because their denominators are the same.



What's More

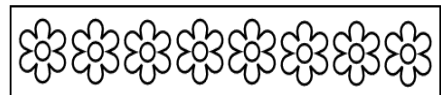
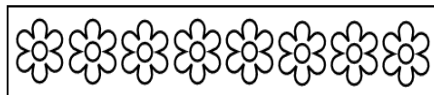
You're doing an amazing job! Let's explore more activity.

Directions: Identify the similar fractions of the shaded parts and non-shaded parts.

	Shaded Parts	Unshaded Parts
Example: 	$\frac{3}{4}$	$\frac{1}{4}$
1. 		
2. 		
3. 		

Directions: Shade the given fraction.

1. $\frac{3}{8}, \frac{5}{8}$



2. $\frac{1}{3}, \frac{2}{3}$





What I have learned

Good job! Let's answer another activity to check your understanding of our lesson.

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

Fractions is a part of a _____ (1) _____ or collection. The number on top and it represents the shaded part is the _____ (2) _____ and _____ (3) _____ is the number of equal parts in a whole or collections. Fractions can be represented by the use of _____ (4) _____, sets and segments. _____ (5) _____ are fractions which denominators are the same.

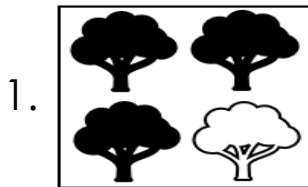
similar fraction	numerator	whole
denominator	regions	



What I can do

Let us try some more.

Directions: Identify the similar fraction that is represented by each number. Choose the letter of the correct answer.

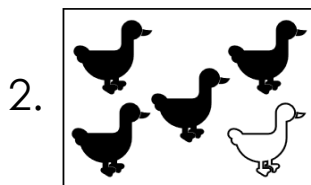


a. $\frac{1}{3}$

b. $\frac{1}{4}$

c. $\frac{1}{5}$

d. $\frac{1}{6}$

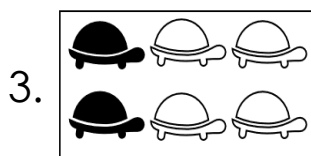


a. $\frac{4}{8}$

b. $\frac{3}{7}$

c. $\frac{2}{6}$

d. $\frac{1}{5}$

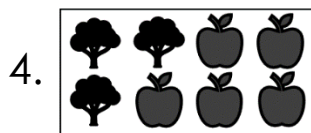


a. $\frac{2}{4}$

b. $\frac{3}{5}$

c. $\frac{4}{6}$

d. $\frac{4}{7}$

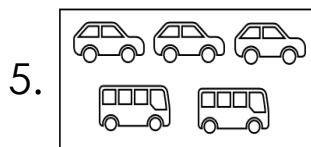


a. $\frac{3}{7}$

b. $\frac{5}{8}$

c. $\frac{3}{9}$

d. $\frac{6}{10}$



a. $\frac{3}{4}$

b. $\frac{3}{5}$

c. $\frac{3}{6}$

d. $\frac{3}{7}$

Lesson 2 - Representing and Identifying Similar Fractions Using Fraction Tiles and Number Line

Hi kids, I hope you are ready now. I know you enjoyed our activities yesterday. This time we will learn more and I know you will like it more.

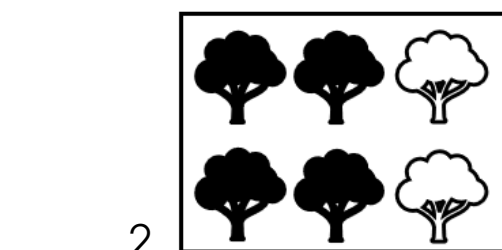


What's In

Great job! Let's get started! Take your time and show how much you know. You're doing amazing!

Directions: Identify the fraction in column A and match it to its similar fractions in column B.

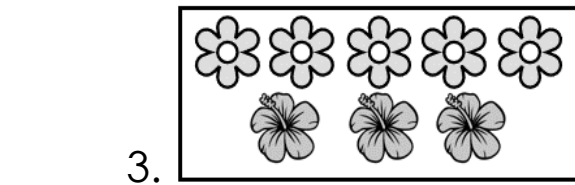
Column A



Column B

a. $\frac{2}{6}$

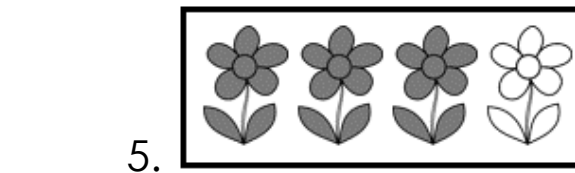
b. $\frac{1}{3}$



c. $\frac{1}{4}$



d. $\frac{1}{5}$



e. $\frac{3}{8}$

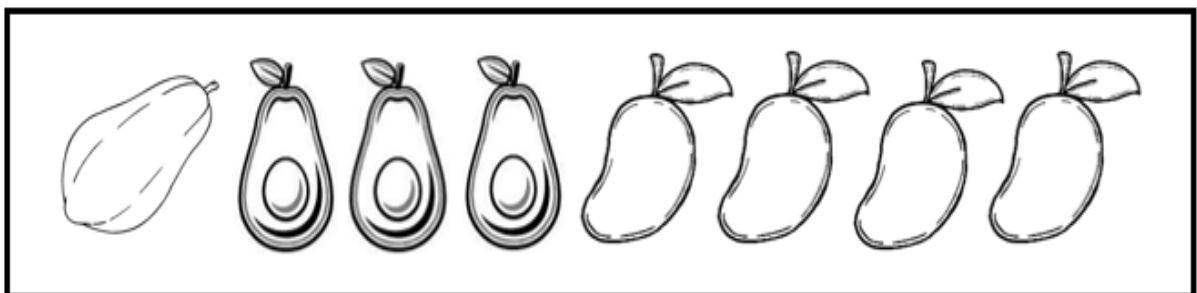


What's New

Great job! Now, let's think carefully about the illustration below and answer the questions that follow. You can do it!

Look at the illustration.

A fruit vendor shared the following fruits with a street kid she saw on her way home.



1. How many mangoes are there? _____
How many avocados are there? _____
How many papayas are there? _____
How many fruits in a set are there? _____
2. Write a fraction to tell what part of the whole set are:
Mangoes: _____
Avocados _____
Papayas: _____
3. What have you observed with the denominators?

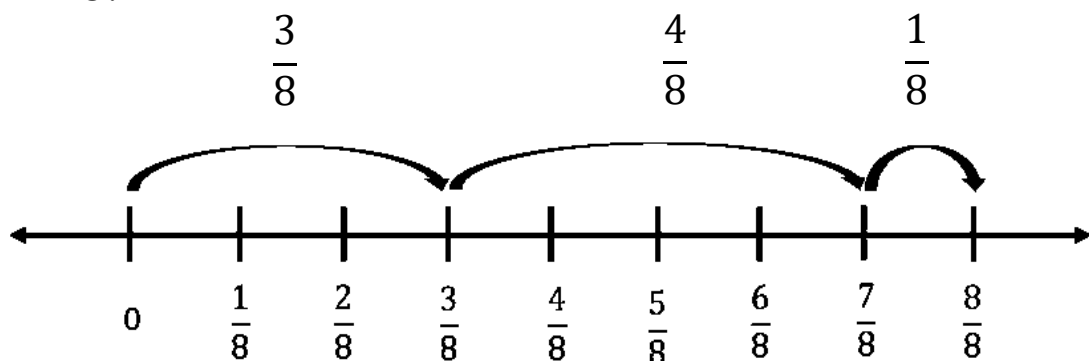


What is It

Today, we're going to learn something new and exciting! I know you'll do great. Let's dive in and have fun exploring together!

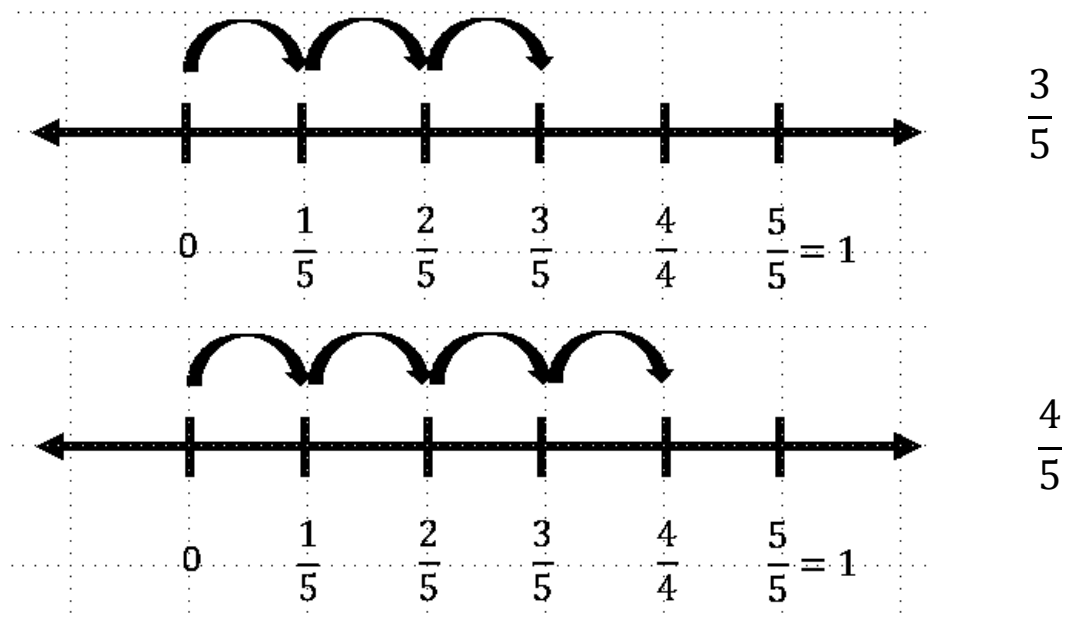
Similar fractions are fraction with the same denominator or total number of equal parts.

- A. Represent and identify similar fractions using number line.

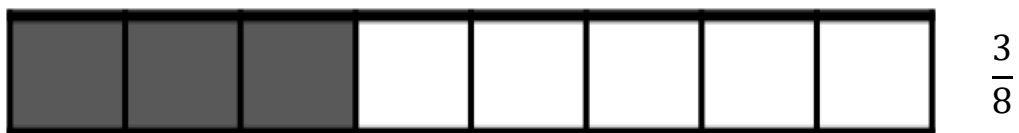


So, $\frac{3}{8}$, $\frac{4}{8}$ and $\frac{1}{8}$ are similar fractions. They can put together because the fraction parts are of the same size. They are all eights.

Another Examples:



B. Represent and identify similar fractions using fraction charts or fraction tiles.



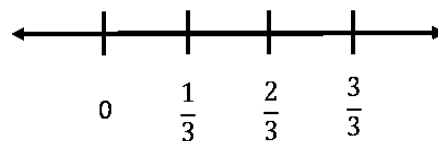
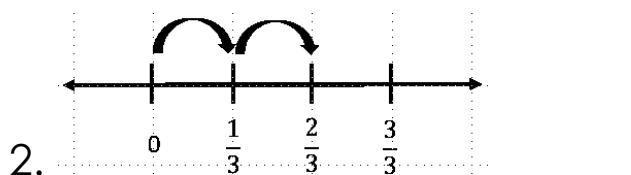
Another examples:

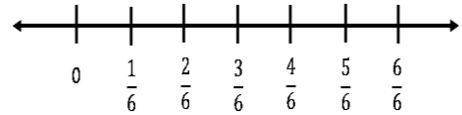
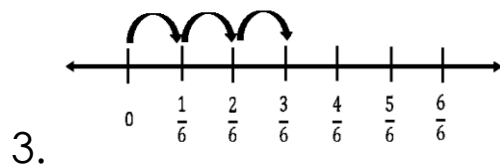


What's More

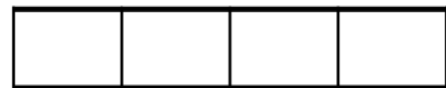
You're doing an awesome job! Let's try more activity and see how much you can do. Keep going – you're getting even better!

Directions: Identify the fractions represented by each number and draw their similar fraction.





Directions: Identify the fractions represented by each number and shade their similar fraction.



What I have learned

You've learned so much! Now, let's test your understanding and see how amazing you really are. I believe in you!

To represent similar fractions, we use a group of objects, charts fractions, fraction tiles and a number line.

To identify similar fraction, look for the denominators if the denominators is the same or equal it is similar fractions.

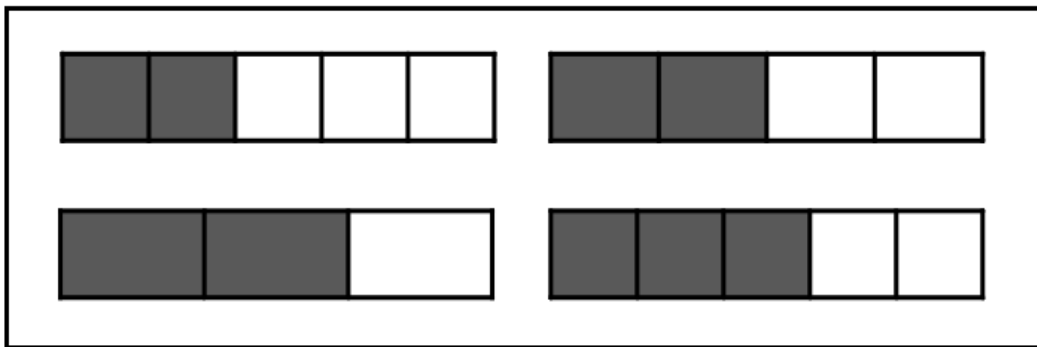


What I can do

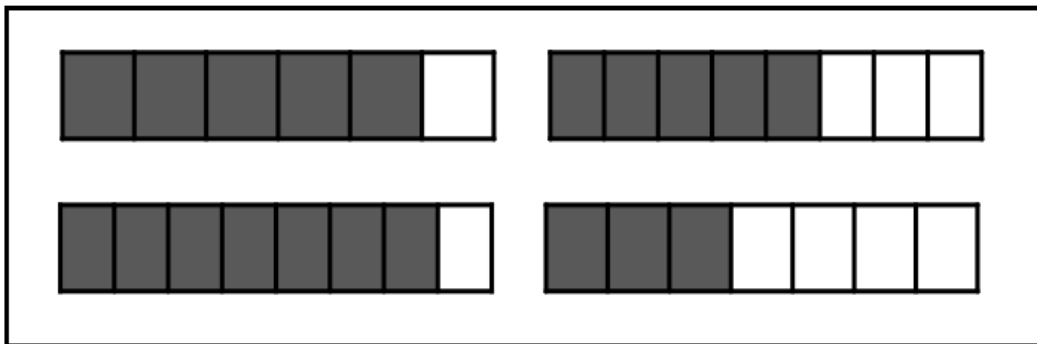
Great job so far! Now, let's keep going and answer another activity. I know you can do it!

Directions: Identify the similar fraction that is represented in each box and encircle it.

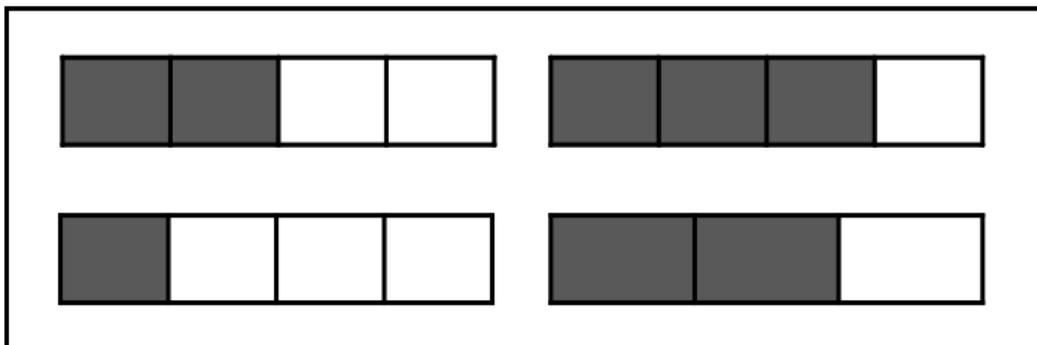
1.

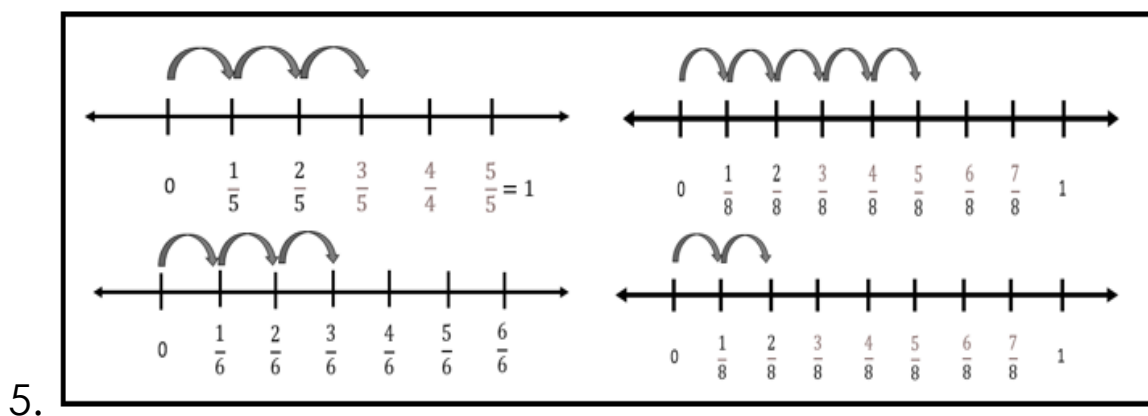
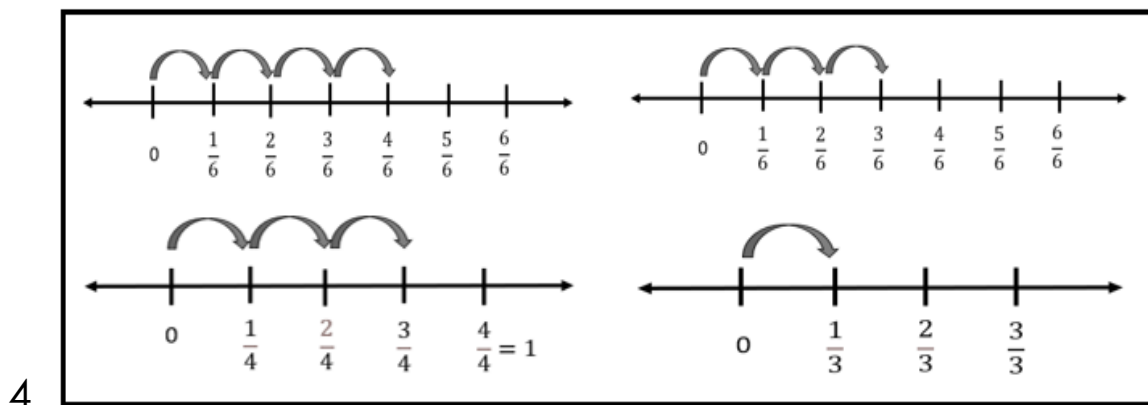


2.



3.

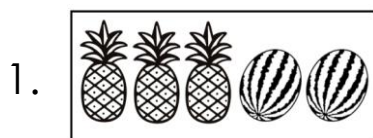




Assessment

You've worked hard and learned a lot! Now, it's time to show what you know in this assessment. I believe in you – you've got this!

Directions: Identify the similar fractions that are represented by each number below. Choose the letter of the correct answer.

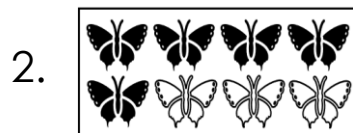


a. $\frac{3}{4}$

b. $\frac{2}{5}$

c. $\frac{3}{6}$

d. $\frac{3}{7}$

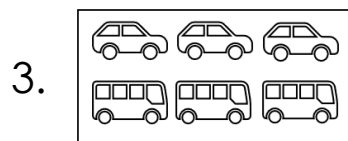


a. $\frac{3}{5}$

b. $\frac{5}{6}$

c. $\frac{3}{7}$

d. $\frac{3}{8}$

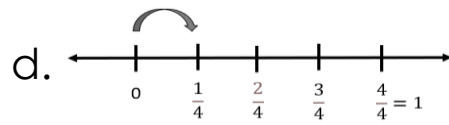
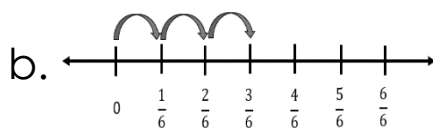
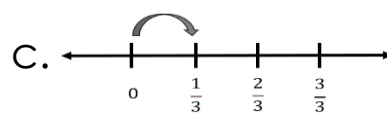
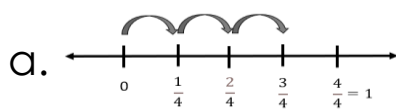


a. $\frac{4}{7}$

b. $\frac{5}{6}$

c. $\frac{3}{6}$

d. $\frac{4}{7}$





Additional Activities

You're doing amazing! Now, let's try another activity and see how much more you can do. Keep it up, you're doing great!

Directions: Draw similar fractions using models, number line and fraction tiles.

1.

Models or objects

2.

Number Line

3.

Fraction Tiles

Answer Key

Lesson 1

What I Know

1. b
2. d
3. d
4. c
5. c

What I Can Do

1. b
2. d
3. c
4. b
5. c

What's In

1. $\frac{1}{3}$
2. $\frac{1}{3}$
3. $\frac{1}{4}$
4. $\frac{1}{6}$
5. $\frac{1}{6}$

What's More

1. $\frac{3}{6}$
2. $\frac{1}{3}$
3. $\frac{3}{5}$
4. $\frac{4}{5}$
5. $\frac{3}{5}$

What I Have Learned

1. whole
2. numerator
3. denominator
4. regions
5. Similar fractions

Lesson 2

What's In

1. b
2. a
3. e
4. d
5. c

Assessment

1. b
2. d
3. c
4. c
5. a

What's More

1. $\frac{1}{4}$
2. $\frac{3}{2}$
3. $\frac{3}{6}$
4. $\frac{4}{3}$
5. $\frac{8}{5}$

What I Can Do

1. $\frac{1}{2}$
2. $\frac{1}{2}$
3. $\frac{1}{2}$
4. $\frac{1}{2}$
5. $\frac{1}{2}$

References

Dela Cruz, Maria Lourdes Protacio. 2021. *Number Smart*. Nicanor Reyes Sr. st., Sampaloc, Manila: Rex Book Store, Inc.

Pascua, Marichu Y. 2020. *Module 2b: Rpresenting Fractions using Regions, Sets and Number Line*. Davao City: Department of Education.

DISCLAIMER

This Self-learning Module (SLM) in **MATHEMATICS 2 - Quarter 4 - Module 2** titled **"Represent and Identify Similar Fractions Using Group of Objects, Fraction Charts, Fraction Tiles and Number Line"** 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:

**Schools Division Office of Tacurong City
Learning Resource Management Section (LRMS)**

Alunan Highway, Poblacion, Tacurong City 9800
Telephone Numbers: 09190656425/064-562-4880
Email Address: tacurong.city@deped.gov.ph