

JANUARY

*Makugihon*

FEBRUARY

*Makiguugnagn*

MARCH

*Matinubangan*

APRIL

*Matinahuron*

MAY

*Mahapsay og Malimpyo*

JUNE

*Maabtik og Masunod sa  
Ihsaklong Oras*

JULY

*Maantigo og Maabilidad*

AUGUST

*Maginkunahunagn  
para sa Urban*

SEPTEMBER

*Madaginton*

OCTOBER

*Matinud-anon*

NOVEMBER

*Masaligan*

DECEMBER

*Maalampon*



Republic of the Philippines

Department of Education

Regional Office IX, Zamboanga Peninsula



Zest for Progress  
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# MATHEMATICS

## 2<sup>ND</sup> QUARTER – Module 3:

### GCF & LCM



Name of Learner: \_\_\_\_\_

Grade & Section: \_\_\_\_\_

Name of School: \_\_\_\_\_

**Grade 4**  
**Alternative Delivery Mode**  
**Quarter 2 - Module 3: GCF & LCM**

**First Edition, 2020**

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## What I Need to Know (Alamin)

### OBJECTIVE:

The learner will be able to solve real-life problems involving GCF and LCM of two given numbers.

### LEARNING COMPETENCY:

The learner solves real-life problems involving GCF and GCM of two given problems. (M4NS-II-d-70.1)



## What's In (Balikan)

### LET'S BE READY

A. Find the common factors and GCF of the following number pairs. Write your answer on your answer sheets or notebook.

1.

12 and 16

Common Factors: \_\_\_\_\_  
GCF: \_\_\_\_\_

2.

15 and 25

Common Factors: \_\_\_\_\_  
GCF: \_\_\_\_\_

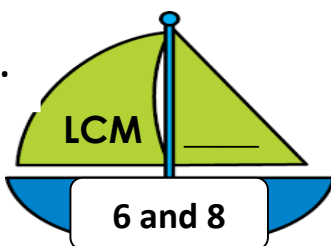
3.

18 and 27

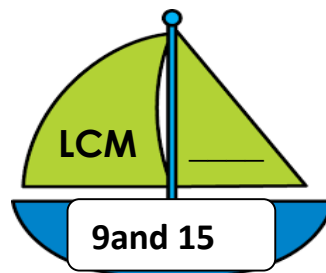
Common Factors: \_\_\_\_\_  
GCF: \_\_\_\_\_

B. Find the LCM of the following number pairs.

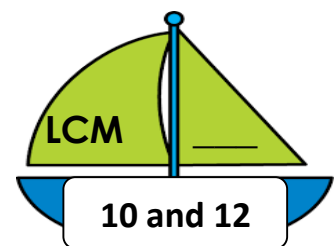
1.



2.



3.



## What's New (Tuklasin)



Directions: Read and analyze the problem. Choose the letter of the correct answer. Encircle the letter of the correct answer.

Cherry baked 48 pieces of butter cookies and 60 chocolate cookies. If she will put them separately in boxes, what is the most number of cookies that boxes will contain if these are of the same number?



1. What does the problem ask for?
  - a. The most number of cookies that a box will contain.
  - b. The least number of cookies that a box will contain.
  - c. The number of boxes.
  - d. The number of cookies.
  
2. What facts are given?
  - a. 20 butter cookies , 30 chocolate cookies.
  - b. 48 butter cookies , 60 chocolate cookies.
  - c. 53 butter cookies , 50 chocolate cookies.
  - d. 36 butter cookies , 40 chocolate cookies.
  
3. How will you solve the problem?
  - a. by finding the least common multiple (LCM)
  - b. by finding the greatest common factor (GCF).
  - c. by listing of common multiple.
  - d. all of the above.
  
4. What is the answer to the problem?
  - a. 10 pieces of cookies
  - b. 8 pieces of cookies
  - c. 12 pieces of cookies
  - d. 16 pieces of cookies



## What is It (Suriin)

Please read and analyze this problem.

### Problem #1

Elvira is going to prepare bouquets of roses and bouquets of daisies. She has 36 roses and 24 daisies. What is the greatest number of each flower that she can use in a bouquet if the bouquets have the same number of flowers?

**You can use the 4-step plan in solving for the answer.**

|                                 |   |
|---------------------------------|---|
| 1. Understand.                  |   |
| What does the problem ask for?  | The greatest number of each flower that she can use in a bouquet.   |
| What facts are given?           | 36 roses , 24 daises  |
| 2. Plan                         |   |
| How will you solve the problem? | By finding the Greatest Common Factor or GCF  |
| 3. Solve                        |   |
| How is the solution done?       | <p><b>SOLUTION # 1</b><br/>         By listing the factors <b>36 and 24.</b><br/>         The factors of <b>36</b> are: <b>1,2,3,4,6,9,18 and 36</b><br/>         The factors of <b>24</b> are: <b>1,2,3,4,6,8,12 and 24</b><br/>         Common Factors: <b>1,2,3,4,6 and 12</b><br/>         Greatest Common Factor : <b>12</b></p> <p><b>SOLUTION # 2</b><br/>         By Prime Factorization.<br/> <math>36 = 2 \times 2 \times 3 \times 3</math><br/> <math>24 = 2 \times 2 \times 2 \times 3</math></p> |

|   |   |    |    |    |   |    |    |   |   |   |  |   |   |
|---|---|----|----|----|---|----|----|---|---|---|--|---|---|
|   | <p>Common Prime Factors :<br/> <math>2 \times 2 \times 3</math></p> <p style="text-align: center;"><math>GCF = 12</math></p> <p><b>SOLUTION # 3</b><br/>         By Continuous Division.</p> <table border="1" style="display: inline-table; vertical-align: middle;"> <tr><td>2</td><td>24</td><td>36</td></tr> <tr><td>2</td><td>12</td><td>18</td></tr> <tr><td>3</td><td>6</td><td>9</td></tr> <tr><td></td><td>2</td><td>3</td></tr> </table> <p><math>GCF : 2 \times 2 \times 3 = 12</math></p> | 2  | 24 | 36 | 2 | 12 | 18 | 3 | 6 | 9 |  | 2 | 3 |
| 2   | 24  | 36 |    |    |   |    |    |   |   |   |  |   |   |
| 2   | 12  | 18 |    |    |   |    |    |   |   |   |  |   |   |
| 3   | 6   | 9  |    |    |   |    |    |   |   |   |  |   |   |
|   | 2   | 3  |    |    |   |    |    |   |   |   |  |   |   |
| 4. Check and Look Back:<br>What is the answer to the problem? | <b>Elvira can use 12 flowers in a bouquet.</b>  |    |    |    |   |    |    |   |   |   |  |   |   |

## Problem 2.

Divina is going to prepare bouquets of roses with 5 roses to a bouquet and bouquets of daisies with 6 daisies to a bouquet. What will be the smallest number of roses and daisies that she will need for her bouquets?

You can still use the 4-step plan in solving for the answer of problem number 2.

|                                 |  |   |   |   |   |   |   |   |   |   |  |   |
|---------------------------------|--|---|---|---|---|---|---|---|---|---|--|---|
| <b>1. Understand.</b>           |  |   |   |   |   |   |   |   |   |   |  |   |
| What does the problem ask for?  | The smallest number of roses and daisies that Divina needs for her bouquets.   |   |   |   |   |   |   |   |   |   |  |   |
| What facts are given?           | 5 roses and 6 daisies  |   |   |   |   |   |   |   |   |   |  |   |
| <b>2. Plan</b>                  |  |   |   |   |   |   |   |   |   |   |  |   |
| How will you solve the problem? | By Finding the <b>Least Common Multiple or LCM</b>   |   |   |   |   |   |   |   |   |   |  |   |
| <b>3. Solve</b>                 |  |   |   |   |   |   |   |   |   |   |  |   |
| How is the solution done?       | <p><b>Solution # 1</b><br/>         By Listing some multiples of 5 and 6<br/>         Multiples of 5 : 5,10, 15,20,25,30,35,40,45,50,55,60...<br/>         Multiples of 6 : 6,12,18,24,30,36,42,48,54,60..<br/>         Common Multiples of 5 and 6 : 30 60<br/>         Least Common Multiple ( LCM) : 30</p>   |   |   |   |   |   |   |   |   |   |  |   |
|                                 | <p><b>Solution # 2</b><br/>         By Prime Factorization<br/> <math>5 = 1 \times 5</math><br/> <math>6 = 2 \times 3</math><br/> <math>LCM = 1 \times 2 \times 5 \times 3 = 30</math></p>   |   |   |   |   |   |   |   |   |   |  |   |
|                                 | <p><b>Solution #3</b><br/>         By Continuous Division</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr><td>2</td><td>5</td><td>6</td></tr> <tr><td>3</td><td>5</td><td>3</td></tr> <tr><td>5</td><td>5</td><td>1</td></tr> <tr><td></td><td>1</td><td>1</td></tr> </table> <p style="text-align: center;"><math>LCM = 2 \times 3 \times 5 = 30</math></p> | 2 | 5 | 6 | 3 | 5 | 3 | 5 | 5 | 1 |  | 1 |
| 2                               | 5  | 6 |   |   |   |   |   |   |   |   |  |   |
| 3                               | 5  | 3 |   |   |   |   |   |   |   |   |  |   |
| 5                               | 5  | 1 |   |   |   |   |   |   |   |   |  |   |
|                                 | 1  | 1 |   |   |   |   |   |   |   |   |  |   |

4. Check and Look Back:  
What is the answer to the problem?

30 is the smallest number of roses and daisies that Divina needs for her bouquet.

- ❖ We use the 4-step plan in solving real-life problems involving GCF and LCM of the two given numbers.
  - Understand
  - Plan
  - Solve
  - Check and Look back
  
- ❖ We solve for the answer by
  - Listing Method
  - Prime Factorization
  - Continuous Division

### What's More (Pagyamanin)



#### A. Read each problem and answer the questions that follow.

Write your answer on your answer sheet/notebook.

1. There are 16 boys and 24 girls. If they will be grouped separately in teams with the same number, what is the biggest number of children in a group?

- a. What is asked for in the problem? \_\_\_\_\_
- b. What facts are given? \_\_\_\_\_
- c. How will you solve the problem? \_\_\_\_\_
- d. What is the answer to the problem? \_\_\_\_\_

2. Mang Andoy is going to put eggs in trays of 6 eggs and 12 eggs. What is the smallest number of eggs that Mang Andoy can put using the trays?

- a. How will you solve the problem? \_\_\_\_\_
- b. What is the answer to the problem? \_\_\_\_\_

**Directions:** Challenge yourself by solving these problems. Write your answer in your notebook.

1. What is the smallest number of avocados that can be placed in the baskets with 50 and 75 pieces?

Answer: \_\_\_\_\_

2. What is the largest number of pechay and cabbage plants that can be planted in rows of equal numbers if there are 60 pechay and 80 cabbage plants?

Answer: \_\_\_\_\_

3. Mary has some chocolates. If she shares them equally among 4 friends or 5 friends, there are always 2 extra chocolates left. What is the possible number of chocolates Mary could have?

Answer \_\_\_\_\_

## Post Assessment



**Directions:** Read and solve each problem. Write your answer on your answer sheets.

1. Mr. Roldan's class is composed of 28 boys and 35 girls. If he is going to make groups of boys and groups of girls for the activities, what is the biggest number of children in the group if they are of the same number?

2. Darie is going to pack puto in boxes of 6 and 12 pieces. What is the smallest number of puto that she can pack using the boxes?

3. Aira baked 30 cupcakes and 24 cookies. If she is going to pack them in boxes of cupcakes and boxes of cookies, what is the most number of each item will the boxes contain if these are of the same number?

4. Aling Maring is going to sell suman in bundles. What is the least number of suman that she could sell in bundles of 3 and 5?

5. Mrs. Lim has 56 cups and 64 glasses. If she will put them in trays of cups and trays of glasses with the same number, what is the biggest number of cups or glasses that a tray will contain?

## ANSWER KEY



### *What's In*

1. Common Factors : 1 , 2 , 4  
GCF = 4

2. Common Factors : 1 , 5  
GCF = 5

3. Common Factors : 1 , 3 , 9  
GCF = 9

B.

1. 24
2. 45
3. 60

### *What's New*

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

### *What's More*

1. a. the biggest number of children in group.  
b. 16 boys , 24 girls  
c. by finding the GCF  
d. 8 children in each group
2. a. by finding the LCM  
b. 12

### *What Can I Do*

1. 150
2. 20
3. 22

### *Post Assessment*

1. 7
2. 12
3. 6
4. 15
5. 8

### **References :**

**K to 12 Grade 4 Curriculum Guide CODEM4NS-IId-70.1**

**LM Math 4 pages 96 -98**

**TG pages 125 – 128**