



Republic of the Philippines

Department of Education

Regional Office IX, Zamboanga Peninsula



JANUARY

Makugihon

FEBRUARY

Mahigugmaon

MARCH

Matinabangan

APRIL

Matinahuron

MAY

Makapstay og Malimpyog

JUNE

*Maabtik og Musunod sa
Dhaklong Oras*

JULY

Maantigo og Maabilidad

AUGUST

*Maginhuhunahunahon
para sa Urban*

SEPTEMBER

Madaginton

OCTOBER

Matinud-anon

NOVEMBER

Masaligan

DECEMBER

Maalampon

4



Zest for Progress
Zeal of Partnership

MATHEMATICS

2ND QUARTER – Module 1:

FACTORS AND MULTIPLES



Name of Learner: _____

Grade & Section: _____

Name of School: _____

Math - Grade 4
Alternative Delivery Mode
Quarter 2 - Module 1: FACTORS AND MULTIPLES

First Edition, 2020

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What I Need to Know (Alamin)

After seriously but with enjoyment doing the activities of this module, you are expected to state, perform on how to **identify factor and multiples of a given number up to 100 (M4NS-IIa-64) and differentiates prime from composite numbers (M4NS-IIb-67)**

The goals in Mathematics education is to help you become a critical thinker and a problem solver individual. The activities of this module are written to further improve your critical thinking and problem solving skills. These acquired skills would soon be applied in your everyday lives.

So, find time to study this module because learning amidst COVID 19 pandemic depends on you.

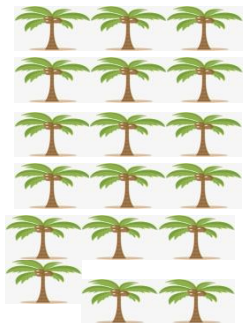
Good luck, stay safe and God bless.

Quarter 2: Week 1-Lesson 1 -Identifying factors of a Given Number, identifies the multiples of a given number up to 100 and differentiates prime from composite numbers



What I Know (Balikan)

ACTIVITY 1 A. *Identifies Factors*



How many rows of coconut trees are there?

How many coconut trees are there in each row?

How many coconut trees are there in all?

To determine the total number of coconut trees in this figure, we can add 3 (the number of trees per row) six (the number of rows) times. This gives us:

$$3 + 3 + 3 + 3 + 3 + 3 = 18.$$

We can also multiplication. We can multiply 3 by 6, or in symbols: 3×6 . His also produces 18. Here, we refer to 3 and 6 as factors of 18. Factors refer to the numbers that you multiply to get the product.

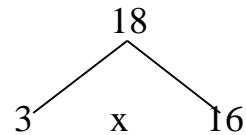
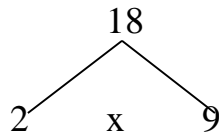
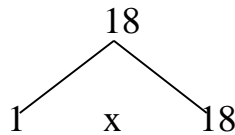
Are 3 and 6 the only factors of 18? Find other factors of 18.



This illustration also shows 18 coconut trees. Here, we only have a single row. In a mathematical statement, we say that 18 (the number for trees in the row) times 1 (the number for rows) is also equal to 18. Therefore, $18 \times 1 = 18$ and 18 and 1 are also factors of 18.

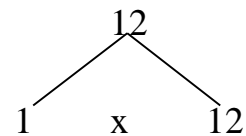
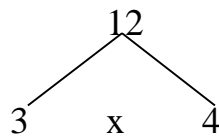
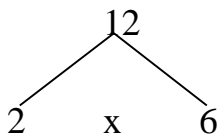


This shows that 9 and 2 are also factors of 18. These factors may also be written using a factor tree:



The factors of 18 are 1, 2, 3, 6, 9 and 18.

Let us find the factors of 12 as the product of two numbers using the factor tree method.



The factors of 12 are 1, 2, 3, 4, 6, 12



What's New (Tuklasin)

A. Give the factors of each number on your paper. Number 1 is done for you.

- | | | | |
|-------|----------|--------|-------|
| 1. 15 | 1,3,5,15 | 6. 32 | _____ |
| 2. 24 | _____ | 7. 45 | _____ |
| 3. 16 | _____ | 8. 56 | _____ |
| 4. 36 | _____ | 9. 54 | _____ |
| 5. 21 | _____ | 10. 72 | _____ |



What is It (Suriin)

Write each number as a product of two factors. Give at least two pairs of factors.

- | | | | |
|---------|--------|---------|-------|
| 1. 20 = | 2 x 10 | 3. 24 = | _____ |
| | 4 x 5 | | _____ |
| 2. 15 = | _____ | 4. 28 = | _____ |
| | _____ | | _____ |

ACTIVITY 2B. Identifies the multiples

Soledad visited her relatives who live at the right side of Ilang-ilang street in a Metro Manila subdivision. While walking, she noticed that house numbers on the left are odd numbers and the numbers on the right are even numbers. If Soledad's relatives live in the 10th house at the right, what do you think is their house number?

Let us help her find the house.

Since the houses at the right side of Ilang-ilang street are even-numbered, taking the tenth multiple of 2 will give you 20.

2, 4, 6, 8, 10, 12, 14, 16, 18, 20

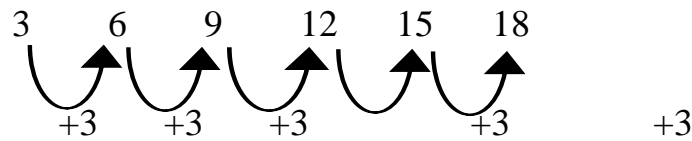
Therefore, Soledad's relatives live on house number 20. The sequence produced by the house numbers is an example of a set of *multiples*.

A multiple refers to the product of a number multiplied by any of the consecutive numbers 1, 2, 3, 4, 5, and so on. For instance, the first five multiples of 8 may be described as follows:

$8 \times 1 = 8$	$8 \times 4 = 32$
$8 \times 2 = 16$	$8 \times 5 = 40$
$8 \times 3 = 24$	

Therefore, the first 5 multiples of 8 are 8, 16, 24, 32 and 40.

In addition, multiples may be formed by adding the same number to the previous multiple. For example,



So, 3, 6, 9, 12, 15 and 18 are multiples of 3.



What's New (Tuklasin)

A. Write the missing multiples of the first number on your paper.

1. 6, _____, 18, _____, 30, _____
2. 3, _____, 9, _____, 15, _____, 21
3. 12, _____, 36, _____, 60, _____



What is It (Suriin)

B. What Number is missing? Write the correct multiple for each number.

1. 27, 36, 45, _____, 63 This a multiple of _____.
2. 16, 20, _____, 28, 32 This a multiple of _____.
3. 24, 30, 36, _____, 48 This a multiple of _____.
4. 50, _____, 70, 80, 90 This a multiple of _____.
5. _____, 30, 35, 40, 45 This a multiple of _____.

ACTIVITY 3C. Differentiates prime and composite number

Prime numbers have exactly two factors: 1 and the number itself.

Compositenumbers are numbers that have more than two factors.

1 is a special number. It is neither a prime nor a composite number.

Examples: **prime numbers** **composite numbers**

$$7 = 7 \times 1$$

$$18 - 1, 18, 2, 9, 3, 6$$

$$31 = 31 \times 1$$

$$12 - 1, 12, 2, 6, 3, 4$$

A. Write **P** if the number is prime and **C** if it is composite.

- | | |
|------------|------------|
| ____ 1. 24 | ____ 4. 13 |
| ____ 2. 11 | ____ 5. 32 |
| ____ 3. 10 | ____ 6. 23 |



What's More (Pagyamanin)

100-CHART

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Follow the instruction below.

Step 1. Encircle number 1.

Step 2. Encircle number 2. Put an x on all multiples of 2 up to 100.

Step 3. Encircle number 3. Put an x on all multiples of 3 up to 100.

Step 4. Encircle number 5. Put an x on all multiples of 5 up to 100.

Step 5. Encircle number 7. Put an x on all multiples of 7 up to 100.

Step 6. List down all encircled numbers in order. These are called prime numbers.

Step 7. List down all mark x numbers in order. These are called prime numbers.



Post Assessment

A. Copy and complete the table in your notebook.

Number	Factors	Number of Factors	Prime or Composite?
9			
23			
31			
45			
57			
73			

B. Give the next 4 multiples of a given number.

1. 7 _____ 2. 10 _____ 3. 15 _____ 4. 12 _____ 5. 20 _____

C.A. Write **P** if the number is prime and **C** if it is composite.

_____ 1. 28

_____ 4. 17

_____ 2. 67

_____ 5. 83

_____ 3. 20

_____ 6. 26



Key to Answers

A. Give the factors

- 1. 1,3,5,15
- 2. 1,2,3,4,6,8,12,24
- 3. 1,2,4,8,16
- 4. 1,2,3,4,6,9,12,18,36
- 5. 1,3,7,21
- 6. 1,2,4,8,16,32
- 7. 1,3,5,9, 15,45
- 8. 8. 1,2,4,7,8,14,28,56
- 9. 1,2,3,6,9,18,27,54
- 10. 1,2,3,4,6,8,9,12,18,24,36,72

A. Express each number. Write **P** if the number is prime and **C** if it is comp

- 1. $20 = 4 \times 5$ 2×10 1. C
- 2. $15 = 3 \times 5$ 5×3 1×5 2. P
- 3. $24 = 6 \times 4$ 8×3 1×24 2×12 3. C
- 4. $28 = 7 \times 4$ 14×2 1×28 4. P

A. Write the missing multiple

- 1. 12,24,36 6 .P
- 2. 6,12,18
- 3. 24,48,72

B. What number is missing

- 1) 54 multiple of 9
- 2) 24 multiple of 4
- 3) 42 multiple of 6
- 4) 60 multiple of 10
- 5) 25 multiple of 5

B. Give the next 4 multiples of a given number.

- 1. 14,21,28,35
- 2. 20,30,40,50
- 3. 30,45,60,75
- 4. 24,36,48,60
- 5. 40,60,80,100

A. Complete the table

9	1,3,9	3	C
23	1,23	2	P
31	1,31	2	P
45	1,3,5,9,45	5	C
57	1,3,19,57	4	C
73	1,73	2	P

C. Write **P** if the number is prime and **C** if it is comp

- 1. C
- 2. P
- 3. C
- 4. P
- 5. P
- 6. C

Reference:

Ofelia G. Chingcuangco, M.A. Ed, Soaring High with MATHEMATICS 4
(Textbook page: 88-90)

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