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Zest for Progress
Zeal of Partnership

MATHEMATICS

2ND QUARTER – Module 7:
DIVISION OF DECIMALS & RATIO

JANUARY
Makugihon

FEBRUARY
Mahigugmaon

MARCH
Matinabangon

APRIL
Matinahuron

MAY
Mahapsay og Malinawy

JUNE
Maabtik og Masunod sa Ihsaktong Oras

JULY
Maantigo og Maabilidad

AUGUST
Maginhunahunaon para sa Uban

SEPTEMBER
Madaginoton

OCTOBER
Matinud-anon

NOVEMBER
Masaligan

DECEMBER
Maalampuon

Name of Learner: _____

Grade & Section: _____

Name of School: _____

Mathematics- Grade 5
Alternative Delivery Mode
Quarter 2 - Module 7: Division of Decimals & Ratio
First Edition, 2020

What I Need to Know

After surpassingly doing the activities of this module, you are expected to solve routine and non-routine problems involving division without or with any of the operations of decimals and whole numbers including money using appropriate solving problem strategies and tools, and visualize the ratio of two given numbers. **(M5NS-IIg-120.1, M5NS-IIh-122)**

The goal in Mathematics education is to help and provide you learning experiences that will encourage you to expect and achieve more in this area. The activities of this module are written to further improve your critical thinking, solve routine and non-routine problems involving division without or with any of the operations of decimals and whole numbers, and visualize the ratio of two given numbers. These acquired skills would soon make a difference in your learning which is essential in your development towards becoming young responsible citizens.

So, find time to study this module and let's build a responsible mathematical community amidst COVID-19 pandemic.

We are with you every step of the way. Good luck, stay safe and God bless.

Lesson	**Solve routine and non-routine problems involving division without or with any of the other operations of decimals and whole numbers including money using appropriate problem-solving strategies and tools, and visualize the ratio of 2 given numbers.**

What's In

Answer the of the following:
1. $24.16 \div 8 =$
2. $9 \div 1.5 =$
3. $10.35 \div 2.3 =$

4. What is the ratio of △ to ◯ ?

△ ◯◯

5. Give the ratio of ▢▢ to ♡ ?

▢ ▢ ♡
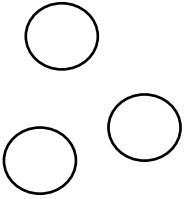
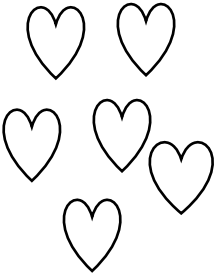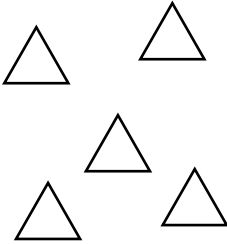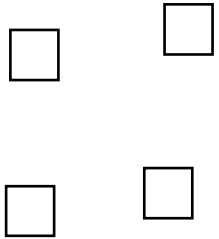| Solve!	
1.	At a department store, men's socks sell at 3 pairs for P97.50. The same kind of socks are sold by sidewalk vendors at 6 pairs for P171.00. Which is the cheaper buy?

_____

2.	

How do we write the ratio of the following?

1. Hearts to squares.   _____

2. Triangles to circles.   _____

3. Circles to hearths.   _____

4. Squares to triangles.   _____

5. Hearts to all the shapes.   _____

What is It

1. We use the 4 steps technique to solve the problem and these steps are the following: Understand, plan, solve, and check.

Understand.
   a. What is asked?
      • Which of the two men's socks is the cheaper buy?
   b. What are the given facts?
      • Three pairs of socks for P97.50 at the department store and 6 pairs of socks for P171.00 at the side walk.

Plan.

Strategy: Divide P97.50 by 3 and P171.00 by 6. We can write these as $97.50 \div 3 = n$; $171.00 \div 6 = n$.

Solve.

```
          32.50                          28.50
       3/ 97.50                      6 ( 171.00
          -9                             12
          ──                            ──
           7
          -6                             51
          ──                             48
                                        ──
          15                             30
         -15                             30
          ──                            ──
           0                              0
           1                              0
          -0                            ──
          ──                             0
           0
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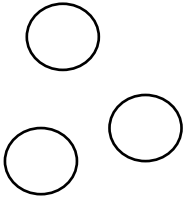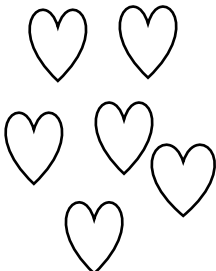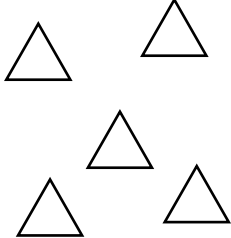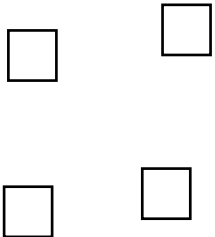
Check.

Use estimation to verify the answer.
97.50 rounds to 98 ÷ 3 is about 33
171   rounds to 170 ÷ 6 is about 28.2

Answer: Since P32.50 > P28.50, the cheaper buy is the 6 pairs of socks for P171.00.

2. Ratio is a comparison of two different things or numbers. We generally express two numbers as ratio using a colon (:)

We write the ratio of the following:
1. Hearths to squares 6:4 (Read: 6 is to 4).
2. Triangles to circles 5:3 (Read as 5 is to 3)
3. Circles to hearts 3:6 (Read as 3 is to 6).
4. Squares to triangles 4:5 (Read as 4 is to 5).
5. Hearts to all the shapes 6:18 (Read as 6 is to 18).

What's More

**Activity 1: Solve the problem using the 4 steps technique.**

A car's gas tank needs 20.35 liters of gasoline to be filled. After filling it, the driver paid P919.82, how much is the cost of gasoline per liter?

a. What is asked in the problem? _____

b. What are given facts? _____

c. What is the number sentence? _____

d. Perform the operation. _____

e. What is the answer? _____

Draw the stated objects to represent the ratio below.
1. 3 stars is to 5 circles   2. 8 balls is to 16 leaves
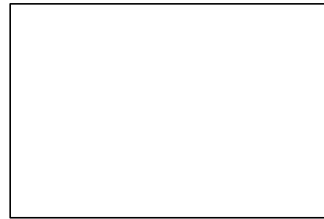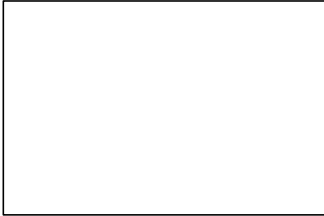
Solve.
1. (2.3 x3) ÷ 0.3 = N
2. An apple costs P 8.50. How many can you buy with P100-bill?

What I Have Learned

How did we solve the word problem involving division of decimals?
How did we write the ratio of two given numbers?

What I Can Do

Prove Yourself: Analyze and answer the following:

Activity 1

Manny has a 17.5 cm iron rod. If he divides it into 2.5 cm equally, how many short rods can he make?

Activity 2

Mr. Cruz is a Grade V Math teacher. He has 30 pupils. One day, he found out that 3 of his pupils were absent. What is the ratio of those who were absent to present?
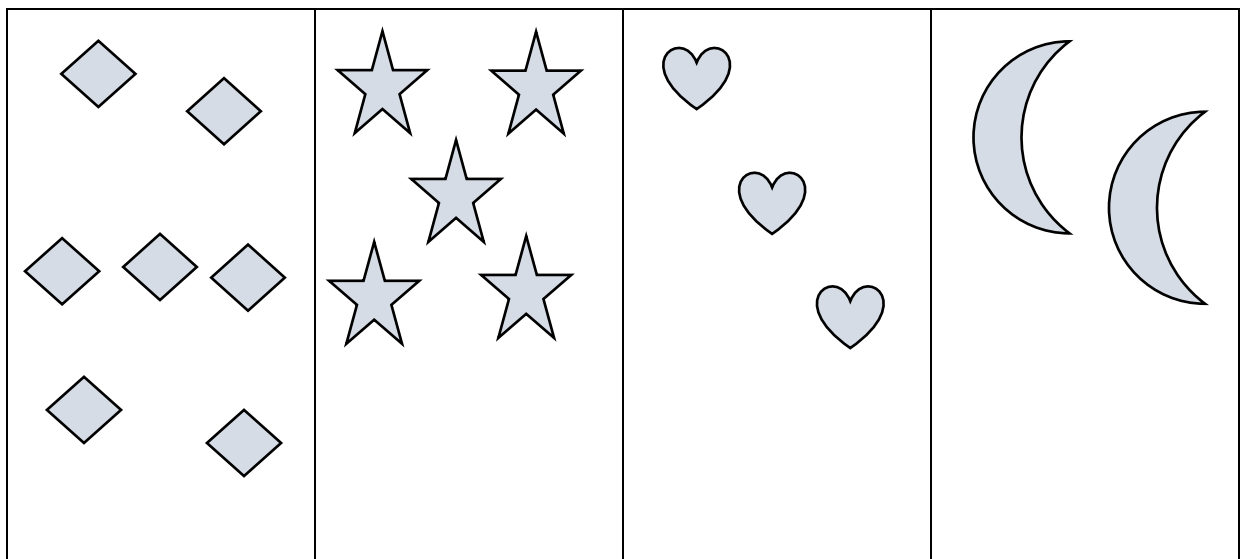
Assessment

Read the questions carefully. Choose the correct answer and write the letter that corresponds the correct answer on your answer sheet.

1. Find the quotient of $9 \div 1.5$.
    A. 4 B. 5 C. 6 D. 7
2. Which of the following is the quotient of $3.2 \div 8$?
    A. 0.3 B. 0.4 C. 0.5 D. 0.6
3. If we divide 6.5 by 0.5, what is the answer?
    A. 13 B. 14 C. 15 D. 16
4. What is the quotient of $0.56 \div 0.7$?
    A. 0.5 B. 0.6 C. 0.7 D. 0.8
5. Five pupils ordered 2 cakes. If they ate an equal amount of the 2 cakes, how much cake did each student eat?
    A. 0.4 B. 0.5 C. 0.6 D. 06

Use the table below to answer questions 6-10.

Give the ratio of the following:

6. Moons to stars.

    A. 2:3 B. 2:5 C. 2:7 D. 2:17

7. Hearts to diamonds.

    A. 3:17 B. 3:2 C. 3:5 D. 3:7

8. Hearts to stars.

    A. 3:17 B. 3:2 C. 3:5 D. 3:7

9. Stars to diamonds

    A. 5:2 B. 5:3 C. 5:7 D. 5:17

10. Moons to all the shapes.

    A. 2:3 B. 2:5 C. 2:7 D. 2:17

 Answer Key

Assessment:

1) C	6) B
2) B	7) D
3) A	8) C
4) D	9) C
5) A	10) D

Additional Activities
Solve
1.) 23   2.) 11   3.) 8

What I Can Do
Activity1
7 short rods
Activity2
3:27

What's More
Activity 1
P45.20
Activity 2
7:5, 8:7, 5:20

What's In
1. 3.02
2. 6
3. 4.5
4. 2:3
5. 4.2

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