



Mathematics 4 Microlearning Module

OUARTER 2 – Module 5 Estimating Quotient





REGION XII - DIVISION OF SULTAN KUDARAT

Mathematics 4 Microlearning Module (MLM) Quarter 2 – Module 5: Estimating Quotient First Edition, 2024

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MICROLEARNING MODULE

Name:		_Grade & Sec: _		_ Score:
Subject:	Mathematics 4	Quarter:	2	MLM No.: 5
Teacher:				
Competency:	Estimate the quotien 1to 2-digit divisors, divisors using multi	nt when dividin by estimating f ples of 10	ig 3 to 4-dig first the div	git dividends by idends and

A. Look Back!

Directions. Using the division operation, complete the table below.

	Dividend	Divisor	Quotient
1	1 865		186 r. 5
2		10	450
3	7 580		75 r. 80
4	4 876	13	
5	5 278	27	

B. What's New?

Directions. Round off numbers as specified, and write your answer in the box.

Then, tick the box if it is rounded up or rounded down.

Round off to the nearest tens.



Round off to the nearest thousands.



C. What Is It?

Let's take a look at this.

Mr. Velasco and his workers gathered 1,175 mangoes on his farm. They place 31 mangoes in each basket. About how many baskets did they use in all?

• The word "*about*" in the problem tells that what you need is not the exact answer, but an *estimate*. When estimating the quotient, use compatible numbers.

First, round off the divisor to the nearest tens, hundreds, or thousands. Then round off the dividend to a *compatible multiple* of the rounded divisor.

 $1175 \longrightarrow \text{to } 1200$ $31 \longrightarrow \text{to } 30$

You know that 1200 is a compatible multiple of 30.

Then divide the rounded numbers.

 $1200 \div 30 = 40$

Complete answer: Mr. Velasco and his workers used about 40 baskets.

To check, get the actual quotient.

	37 r. 28 ←	Actual quotient
31	1175	It is close to estimated quotient
	- 92	which is 40.
	245	
	- 217	
	28	

Here are other examples.

306 ÷ 6 = _____
 Round off the dividend 306 to 300.
 You may choose not to round off the one-digit divisor.
 So, 300 ÷ 6 = 50.

The estimated quotient is 50.

To check, divide.

6/306 -30	•	The actual quotient is close to the estimated quotient, which is 50
6		
- 6		
0		

2. 2126 ÷ 32 = _____

Round off the numbers, and you get these values.

$$2126 \longrightarrow 2100$$

$$32 \longrightarrow 30$$

$$2100 \div 30 = \boxed{70} \longleftarrow \text{Estimated quotient}$$

To check, divide the to get the actual quotient.

32	66 r. 14 ◀ 2126 192	The actual quotient is close to the estimated quotient, which is 70
-	206	
	-192	
	14	

D. Let's Try!

Directions. Change the dividend to the closest multiple of the divisor, and write your answer on the line below.

1) 3341 ÷ 40	2) 4693 ÷ 60	3) 4467 ÷ 50

4) 5764 ÷ 70	5) 8654 ÷ 80	6) 5438 ÷ 40
7) 4156 ÷ 60	8) 7658 ÷ 30	9) 8543 ÷ 70
	10) 8795 ÷ 20	

E. Let's Evaluate

A. Estimate the quotient of the following.

1. 33 5824	2. 44 3596	3. 34 2756
4. 17/3243	5. 46 4876	6. 62 7965

B. Estimate the answer to the following problem. Write your answer in a complete sentence on the line provided.

- Janel's father earns ₱ 20 546 in a month. If he works 22 days in a month, about how much is his daily earnings?
- Nena's mother baked 435 *pandesal*. She packed 2 dozen *pandesal* in a box. About how many boxes did she use?

F. Reference

G. Creag, Herminia C. 2022. Real–Life Mathematics 4 Second Edition. Quezon City, Philippines: ABIVA Publishing House, Inc.

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Answer Key

2. About 16 boxes. (answers may vary, but close to the given)

1. About $\, f \!\!\!\!$ 1 050. (answers may vary, but close to the given) В.

- 6. 133
- 2.100
- 4.150
- 3.100
- 2.100
- A. 1.200

E. Let's Evaluate!

10. 8 800	5. 8 700
009 8 °C0	4.5 800
007 7 .8	3.4 500
7. 4 200	2. 4 700
9 [.] 2 4 00	1.3 300

D. Let's Try

qu-bnuor – 000 7 .6

- Q. 9 000 round-up

qu-bnuor - 008.8

1. 600 – round-up

a. 60 – round down

2. 50 – round down

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1. 50 – round-up

S. What's New?

3.100

1.10

А. Гоок Васк!

2.4500

5. 195 r. 13

4. 375 r. 1

2. Soo – round down

- qu-bnuor 008 .1