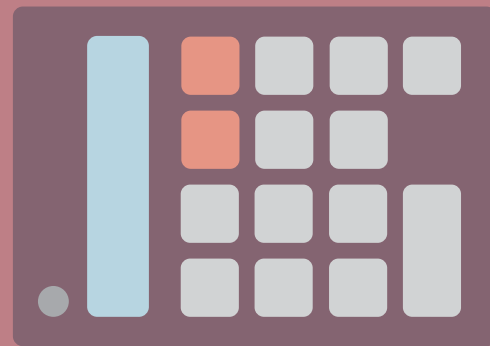




MATH

Student Book

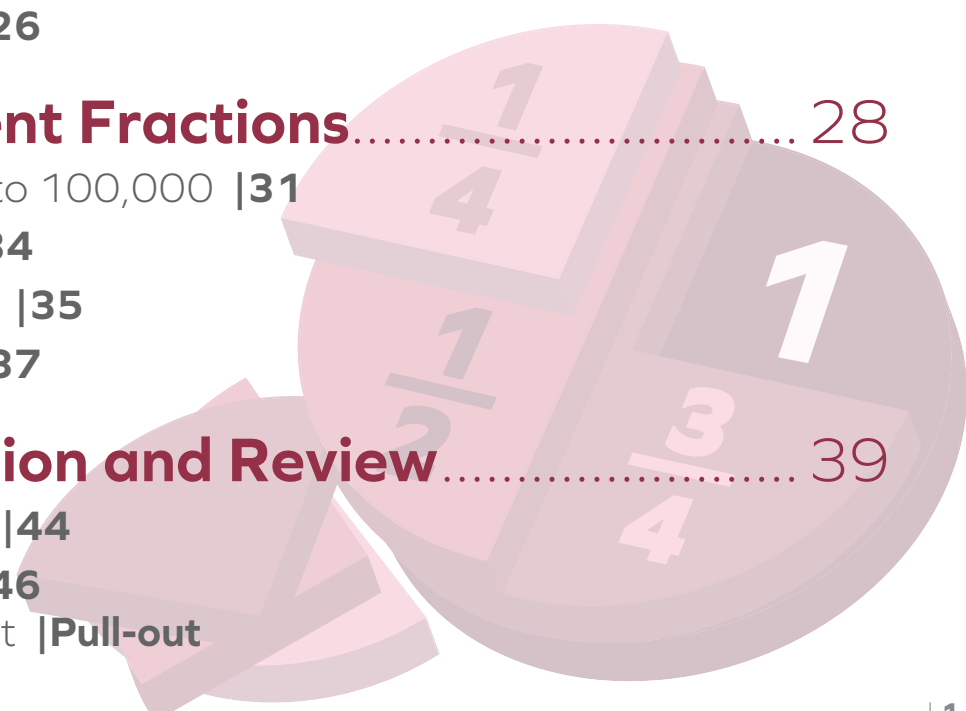


► **4th Grade | Unit 3**

MATH 403

SEQUENCING AND ROUNDING

1. Rounding Numbers to 1,000's	3
Multiplying with Carrying to 10's	7
Self Test 1	10
2. Estimating to 100's	12
Fractions Equal to Whole Numbers	15
Self Test 2	18
3. Estimating to 1000's	20
Operation Signs	21
Adding and Subtracting Fractions	22
Adding and Subtracting to 10,000	24
Self Test 3	26
4. Equivalent Fractions	28
Place Value to 100,000	31
Equations	34
Solid Shapes	35
Self Test 4	37
5. Application and Review	39
Line Graphs	44
Self Test 5	46
LIFEPAC Test	Pull-out



Author:

Carol Bauler, B.A.

Editor:

Alan Christopherson, M.S.

Media Credits:

Page 3: © agsandrew, iStock, Thinkstock; **6:** © cole matt, iStock, Thinkstock; **12:** © valedol, iStock, Thinkstock; **20:** © agsandrew, iStock, Thinkstock; **28:** © grapestock, iStock, Thinkstock; **33:** © .Dssart Studio, iStock, Thinkstock; **39:** (top) © Photodisc, Thinkstock; (bottom) © cole matt, iStock, Thinkstock; **40:** © Dynamic Graphics Group, Thinkstock; **42:** © j_mac, iStock, Thinkstock; **43:** (top) © Amina Ganic, iStock, Thinkstock; (top) © Rawpixel Ltd, iStock, Thinkstock; **44:** © moremarinka, iStock, Thinkstock.



**804 N. 2nd Ave. E.
Rock Rapids, IA 51246-1759**

© MCMXCVII by Alpha Omega Publications, Inc. All rights reserved.
LIFEPAC is a registered trademark of Alpha Omega Publications, Inc.

All trademarks and/or service marks referenced in this material are the property of their respective owners.
Alpha Omega Publications, Inc. makes no claim of ownership to any trademarks and/or service marks other than their own and their affiliates, and makes no claim of affiliation to any companies whose trademarks may be listed in this material, other than their own.

1. ROUNDING NUMBERS TO 1,000'S

Objectives

Read these objectives. When you have completed this section, you should be able to:

- Round numbers to 1,000's.
- Multiply with carrying to 10's.

We have learned the places for numbers to ten thousands.

ten thousands	one thousands	hundreds	tens	ones
6	7,	4	3	2

67,432 is read, "sixty-seven thousand, four hundred thirty-two."

We use a hyphen to join the tens' numbers and ones' numbers.

We write a comma between the thousands' place and hundreds' place.



Complete this activity.

1.1 Write the numbers in number words.

- a. 38,643 _____
- b. 9,582 _____
- c. 87,053 _____
- d. 4,001 _____



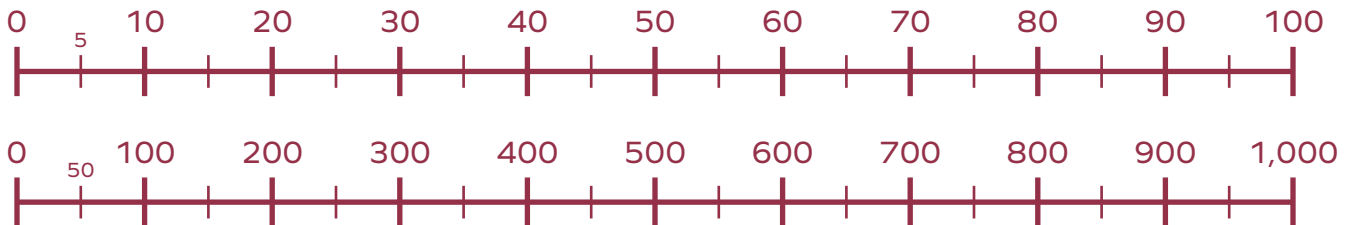
Complete these activities.

1.2 Write “how many” and then show the value.

	ten thousands	one thousands	hundreds	tens	ones
a. 805 =	_____	+ _____	+ _____	+ _____	+ _____
	= _____	+ _____	+ _____	+ _____	+ _____
b. 5,380 =	_____	+ _____	+ _____	+ _____	+ _____
	= _____	+ _____	+ _____	+ _____	+ _____
c. 18,462 =	_____	+ _____	+ _____	+ _____	+ _____
	= _____	+ _____	+ _____	+ _____	+ _____

1.3 Zero has no value. Zero is called a _____.

Numbers can be rounded to the nearest 10’s or 100’s.



Two-digit numbers are rounded to the nearest 10.

68 is nearest 70.

Three-digit numbers are rounded to the nearest 100.

237 is nearest 200.

Two-digit numbers that end in 5 are rounded up.

75 is nearest 80.

Three-digit numbers that end in 50 are rounded up.

450 is nearest 500.

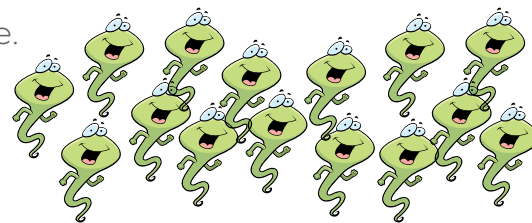
1.4 Round the 2-digit numbers to the nearest 10’s.

Round the 3-digit numbers to the nearest 100’s.

- | | |
|--------------|--------------|
| a. 85 _____ | b. 76 _____ |
| c. 358 _____ | d. 560 _____ |
| e. 485 _____ | f. 650 _____ |
| g. 32 _____ | h. 841 _____ |

1.5 Write the answer by using rounding to estimate.

- a. Jim caught 53 tadpoles. Jim told his dad,
"I caught close to _____
tadpoles."



- b. Mary read 43 pages in her book on Monday, 23 pages on Tuesday, and 35 on Wednesday. Mary read close to _____ pages in her book in three days.

1.6 Write the fact families for these numbers.

- a. 7, 6, 13 _____
b. 17, 9, 8 _____
c. 8, 11, 3 _____
d. 6, 0, 6 _____



Count by thousands on the number line from 0 to 10,000.

We can **round** a number by finding its nearest thousands' number.

A number that has been rounded to thousands always ends in three zeros (000).

We want to round 6,542 to the nearest thousands' number.

We find 6,542 on the number line. The thousands' number it is nearest to is 7,000.

We can round 6,542 to 7,000.

1.7 Round these numbers to the nearest thousands' number.

- a. 8,631 _____ 9,448 _____ 3,235 _____
b. 3,674 _____ 5,320 _____ 4,082 _____
c. 6,357 _____ 2,803 _____ 7,638 _____

When we round to thousands, we look at the number in the hundreds' place to decide the nearest thousands' number. If the number in the hundreds' place is 5 followed by two zeros (500), the number is rounded to the next higher 1,000's number. We can round 3,500 to 4,000.



Complete these activities.

1.8 Round these numbers to the nearest thousands' number.

- | | | | |
|----|-------------|-------------|-------------|
| a. | 2,500 _____ | 5,500 _____ | 8,500 _____ |
| b. | 2,358 _____ | 6,420 _____ | 1,005 _____ |
| c. | 9,500 _____ | 7,688 _____ | 9,489 _____ |

When we round numbers, we are **estimating**.

1.9 Read the sentence. Estimate the answer to the nearest thousands.

Two youth groups were collecting pennies for a fund drive. The first group collected 1,376 pennies, and the second group collected 2,582 pennies. Together, the two groups collected close to _____ pennies.

1.10 Solve. Name the parts.

- | | | |
|----|----------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| a. | $\begin{array}{r} 83 \\ \times 3 \\ \hline \end{array}$ _____

_____ | $\begin{array}{r} 51 \\ \times 2 \\ \hline \end{array}$ _____

_____ |
| b. | $\begin{array}{r} 304 \\ \times 2 \\ \hline \end{array}$ _____

_____ | $\begin{array}{r} 731 \\ \times 3 \\ \hline \end{array}$ _____

_____ |

Multiplying with Carrying to 10's

We have learned to carry in addition when there is a 2-digit answer.

We can carry in multiplication when there is a 2-digit answer.

Look at the example.

$4 \times 3 = 12$. We cannot write a 2-digit number in the ones' place.

12 is equal to 2 ones and 1 ten.

We write the 2 in the ones' place and carry the ten.

$$\begin{array}{r} 1 \\ 23 \\ \times 4 \\ \hline 92 \end{array}$$

Multiply. 4×3 ones = 12 ones.

Write the 2 ones in the ones' place and carry 1 ten.

Multiply. 4×2 tens = 8 tens.

Add the 1 ten and write the total in the tens' place.

$$\begin{array}{r} 4 \\ 36 \\ \times 7 \\ \hline 252 \end{array}$$

Multiply. 7×6 ones = 42 ones.

Write the 2 ones in the ones' place and carry 4 tens.

Multiply. 7×3 tens = 21 tens.

Add the 4 tens and write the total in the tens' and hundreds' places.



Complete this activity.

1.11 Multiply. Carry the tens' number.

$$\begin{array}{r} 25 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 54 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 76 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 39 \\ \times 4 \\ \hline \end{array}$$



Complete this activity.

1.12 Find the products.

a. $\begin{array}{r} 16 \\ \times 4 \\ \hline \end{array}$ $\begin{array}{r} 34 \\ \times 3 \\ \hline \end{array}$ $\begin{array}{r} 55 \\ \times 5 \\ \hline \end{array}$ $\begin{array}{r} 37 \\ \times 6 \\ \hline \end{array}$

b. $\begin{array}{r} 26 \\ \times 9 \\ \hline \end{array}$ $\begin{array}{r} 52 \\ \times 5 \\ \hline \end{array}$ $\begin{array}{r} 46 \\ \times 3 \\ \hline \end{array}$ $\begin{array}{r} 82 \\ \times 7 \\ \hline \end{array}$

c. $\begin{array}{r} 65 \\ \times 8 \\ \hline \end{array}$ $\begin{array}{r} 47 \\ \times 4 \\ \hline \end{array}$ $\begin{array}{r} 83 \\ \times 3 \\ \hline \end{array}$ $\begin{array}{r} 71 \\ \times 6 \\ \hline \end{array}$

d. $\begin{array}{r} 93 \\ \times 5 \\ \hline \end{array}$ $\begin{array}{r} 42 \\ \times 9 \\ \hline \end{array}$ $\begin{array}{r} 36 \\ \times 4 \\ \hline \end{array}$ $\begin{array}{r} 94 \\ \times 7 \\ \hline \end{array}$

We have found that rules are easier to learn when we find a pattern.

Zero times any number always equals zero.

$0 \times 4 = 0$ $0 \times 5 = 0$ $0 \times 24 = 0$ $0 \times 47 = 0$

Two times any number always equals an even number.

$2 \times 4 = 8$ $2 \times 5 = 10$ $2 \times 24 = 48$ $2 \times 47 = 94$

Five times any number always equals a number that ends in zero or five.

$5 \times 4 = 20$ $5 \times 5 = 25$ $5 \times 24 = 120$ $5 \times 47 = 235$



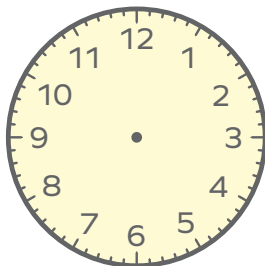
Complete these activities.

1.13 Write the answer to the multiplication problems. Circle the number that proves your answer is following the pattern.

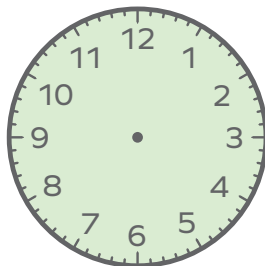
a. $\begin{array}{r} 0 \\ \times 8 \\ \hline \end{array}$ $\begin{array}{r} 36 \\ \times 2 \\ \hline \end{array}$ $\begin{array}{r} 34 \\ \times 5 \\ \hline \end{array}$ $\begin{array}{r} 25 \\ \times 0 \\ \hline \end{array}$ $\begin{array}{r} 63 \\ \times 2 \\ \hline \end{array}$

b. $\begin{array}{r} 27 \\ \times 5 \\ \hline \end{array}$ $\begin{array}{r} 46 \\ \times 5 \\ \hline \end{array}$ $\begin{array}{r} 29 \\ \times 2 \\ \hline \end{array}$ $\begin{array}{r} 76 \\ \times 0 \\ \hline \end{array}$ $\begin{array}{r} 103 \\ \times 2 \\ \hline \end{array}$

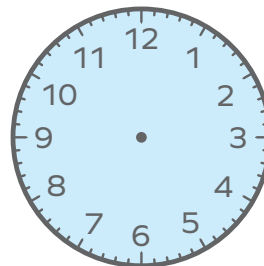
1.14 Draw the hands on the clock to show the time.



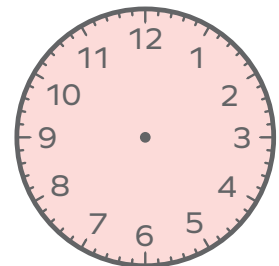
6:15



3:25



9:17



1:53



Review the material in this section to prepare for the Self Test. The Self Test will check your understanding of this section. Any items you miss on this test will show you what areas you will need to restudy in order to prepare for the unit test.

SELF TEST 1

Write the numbers in number words (each answer, 1 point).

- 1.01 a. 47,063 _____
 b. 79,531 _____

Write "how many" and then show the value (this question, 2 points).

1.02

	ten thousands	one thousands	hundreds	tens	ones
21,302 =	_____	+	_____	+	_____
	_____	+	_____	+	_____

Complete these activities (each answer, 1 point).

- 1.03 Round these numbers to the nearest thousands' number.
 6,491 _____ 8,031 _____ 3,500 _____

- 1.04 Read the sentence. Estimate the answer to the nearest thousands.
 The committee was planning on serving a cookout for the picnic. They planned on serving 387 men, 385 women, and 2,456 children.
 They planned on serving close to _____ people.

- 1.05 Solve. Name the parts.
- a.
- | | |
|-----|--|
| 83 | |
| × 3 | |
| | |

- 1.06 Write the family of facts
 15, 8, 7 _____

1.07 Find the products.

a.
$$\begin{array}{r} 27 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 46 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 39 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 56 \\ \times 7 \\ \hline \end{array}$$

b.
$$\begin{array}{r} 73 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 62 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 75 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 52 \\ \times 7 \\ \hline \end{array}$$

1.08 Zero times any number always equals _____.

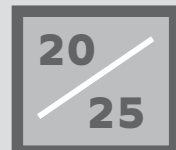


Teacher check:

Score _____

Initials _____

Date _____





MAT_Gr3-5



804 N. 2nd Ave. E.
Rock Rapids, IA 51246-1759

800-622-3070
www.aop.com

MAT0403 - Jan '16 Printing

ISBN 978-0-86717-453-3



9 780867 174533