

## Student Book

## 3rd Grade | Unit 2

## MATH 302

## CARRYING AND BORROWING

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NOTE to teachers, parents, and students:
As part of a continuing effort to improve the LIFEPAC curriculum a new layout of this unit has been produced. The content of this unit has not changed but the page numbers referenced in the Teacher Notes of the Teacher's Guide may no longer match.

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## CARRYING AND BORROWING

This unit begins with a review of basic fact families, patterns, addition, and subtraction. This information will be used to expand your skills in adding with carrying, skip-counting, and place value. There will be additional practice in subtraction with borrowing , checking addition and subtraction, money, and fractions. You will learn to classify numbers as odd or even, to name the parts of a fraction, and to name lines. In this LIFEPAC ${ }^{\oplus}$, you will also practice the skills of sequencing and naming shapes.

## Unit Objectives

Read these objectives. The objectives tell you what you will be able to do when you have successfully completed this LIFEPAC.

## 1. I know fact families.

2. I can recognize patterns.
3. I can add with carrying to hundreds' place.
4. I can skip-count by 2's, 5's, and 10's.
5. I know even and odd numbers.
6. I can read and write fractions.
7. I can learn the names of fractions.
8. I can subtract with borrowing to tens' place.
9. I can recognize flat and solid shapes.
10. I can learn about lines and end points.
11. I know pennies, nickels, dimes, quarters, and dollars.
12. I can check addition and subtraction problems.

## 1. FAMILY OF FACTS

In this section, you will use fact family to complete patterns. You will review digits, addition, and subtraction.

## Fact Families

Some addition and subtraction facts belong together.
Facts that belong together are fact families.
Each family has two addition and two subtraction facts.
If we know one fact, we know four facts.
Fact families make it easier to learn.

If we know
we also know
If we know
we also know
$2+3=5$
$3+2=5 \quad 5-2=3 \quad 5-3=2$
$15-8=7$
$15-7=8 \quad 7+8=15$
$8+7=15$


Complete these activities.
1.1 Complete the fact families.
$6+4=10$
$\qquad$ $=$ $\qquad$
$\qquad$
$\qquad$ $=$ $\qquad$
$\qquad$ $=$ $\qquad$
$14-8=6$
$\qquad$
$\qquad$ $=$ $\qquad$
$\qquad$ $=$ $\qquad$
$8+5=13$
$\qquad$
$=$ $\qquad$
$\qquad$
$\qquad$ $=$ $\qquad$
$\qquad$
$\qquad$
$\qquad$
$9-1=8$
$\qquad$ $=$ $\qquad$
$\qquad$ $=$ $\qquad$

$$
7+9=16
$$

$\qquad$
$\qquad$

$$
=
$$

$\qquad$
$\qquad$
$\qquad$ $=$ $\qquad$
$\qquad$
1.2 Write the numbers in number order.
923
523
823
723
623
423
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
1.3 Write the answers to the facts.

| + | 2 | 8 | 6 | 3 | 9 | 5 | 4 | 3 | 0 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 3 |  |  |  |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |  |  |  |

## Patterns

Patterns help us learn, how to find answers, and how to remember.
When we find a pattern, we can tell what comes next.
The ten digits make a pattern.
We can write part of the pattern.
We write three dots to show there is more.

$$
0, \quad 1, \quad 2, \quad 3, \quad \ldots
$$

## $\Rightarrow$ Complete these activities.

1.4 Write the digits to complete the pattern.

0, 1, 2, 3, $\qquad$ , $\qquad$ , $\qquad$ , $\qquad$ , $\qquad$ , $\qquad$

There is a pattern to addition and subtraction facts. Some addition and subtraction facts make a family of facts.
1.5 Write the family of facts to complete the pattern.
$5+6=11$
$\qquad$ $=$ $\qquad$
$\qquad$
$\qquad$ $=$ $\qquad$
$\qquad$

There is a pattern to counting. We count in number order from small to large.
1.6 Write the next five numbers to continue the pattern. 135, 136, 137, $\qquad$ , $\qquad$ , $\qquad$ , $\qquad$ , $\qquad$ , ...

Patterns are a sensible grouping of numbers. We look for how numbers relate to each other. We look for a pattern.
1.7 Write the next three numbers. 84, 83, 82, $\qquad$ , $\qquad$ , $\qquad$ , ...

Describe the pattern. $\qquad$
1.8 Write the answer.

Jack was digging in his garden. The first day he found 2 worms, the second day he found 4 worms, the third day he found 6 worms. Following the pattern, how many worms would Jack find on the fourth day? $\qquad$ Write the pattern in numbers.

## Addition Review

## 1 Complete these activities.

1.9 Add ones. Add tens. Add hundreds.

| 26 | 12 | 33 | 10 | 45 |
| ---: | ---: | ---: | ---: | ---: |
| +2 | +7 | +4 | +9 | +3 |


| 56 | 79 | 40 | 63 | 42 |
| :---: | :---: | :---: | :---: | :---: |
| +31 | +10 | +23 | +24 | +35 |
| 80 | 44 | 75 | 17 | 50 |
| + 15 | +23 | +13 | +41 | +25 |


| 375 | 462 | 164 | 446 |
| ---: | ---: | ---: | ---: |
| $+\quad 23$ |  |  |  |


| 252 | 217 | 417 | 379 |
| ---: | ---: | ---: | ---: |
| +433 | +582 | +341 | +310 |


| 460 | 543 | 352 |
| ---: | ---: | ---: |
| +423 | +323 | +114 |

1.10 Add.

| 2 | 3 | 4 | 7 | 3 | 5 |
| ---: | ---: | ---: | ---: | ---: | ---: |
| 2 | 2 | 2 | 2 | 5 | 2 |
| +2 | +3 | +2 | +4 | +8 | +4 |

If the sum of the ones' place is more than 9, we carry to the tens' place.
1.11 Add.

| 24 | 48 | 67 | 55 | 43 |
| ---: | ---: | ---: | ---: | ---: |
| +6 | +7 | +4 | +9 | +7 |


| 25 | 47 | 29 | 52 |
| ---: | ---: | ---: | ---: |
| +39 | +37 | +19 | +28 |


| 43 | 58 | 29 | 49 |
| ---: | ---: | ---: | ---: |
| +47 | +25 | +28 | +17 |


| 56 | 49 | 25 | 64 |
| ---: | ---: | ---: | ---: |
| +18 | +33 | +27 | +26 |

## Subtraction Review

## Complete these activities.

1.12 Subtract ones. Subtract tens. Subtract hundreds.

| 58 | 74 | 48 | 17 | 88 |
| ---: | ---: | ---: | ---: | ---: |
| -3 | -2 | -1 | -4 | -2 |
|  |  |  |  | -2 |
| 95 | 67 | 88 | 58 | 75 |
| -15 | -23 | -13 | -41 | -25 |


| 85 | 99 | 58 | 49 |
| ---: | ---: | ---: | ---: |
| -52 | -17 | -12 | -30 |


| 287 |
| ---: |
| $-\quad 31$ |


| 559 |
| ---: |
| $-\quad 42$ |

$$
\begin{array}{r}
657 \\
-\quad 399 \\
\hline
\end{array}
$$

| 787 |
| ---: |
| $-\quad 251$ |

983
777
958
$-251$
$\begin{array}{r}-123 \\ \hline\end{array}$
$-435$
$-512$
$\begin{array}{r}685 \\ -433 \\ \hline\end{array}$
799
758
689
$-582$

- 341
$-310$

For this Self Test, study what you have read and done. The Self Test will check what you remember.

## SELF TEST 1

Complete these activities (each answer counts 1 point, except where otherwise noted).
1.01 Complete the fact families. (1 point each fact)

$$
7+6=13
$$

$\qquad$

$$
=
$$

$\qquad$
$\qquad$
$\qquad$ $=$ $\qquad$
$\qquad$
$\qquad$
$\qquad$
$17-8=9$
$\qquad$
$\qquad$ $=$ $\qquad$
$\qquad$
$\qquad$ $=$ $\qquad$
$\qquad$
$\qquad$ $=$ $\qquad$
1.02 Write the next three numbers to continue the pattern.

36, 37, 38, $\qquad$ _, $\qquad$ , $\qquad$ ,
Are there more numbers in the pattern? $\qquad$
1.03 Add or subtract.

| 36 | 71 | 421 | 356 | 2 |
| :---: | :---: | :---: | :---: | :---: |
| + 3 | +25 | + 58 | +642 | 4 |
| 86 | 45 | 37 | 58 | 29 |
| $\begin{array}{r}86 \\ + \\ \hline\end{array}$ | +8 | $\underline{+24}$ | $\begin{array}{r}\text { + } \\ + \\ \hline\end{array}$ | +45 |
| 59 | 87 | 378 | 935 | 764 |
| -4 | -36 | -52 | - 203 | -324 |

$\qquad$

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