

## 3rd Grade | Unit 1

## MATH 301

## ADDITION AND SUBTRACTION

## TO 18 AND PLACE VALUE

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## ADDITION AND SUBTRACTION TO 18 AND PLACE VALUE | Unit 1

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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# ADDITION AND SUBTRACTION TO 18 AND PLACE VALUE 

This unit begins with a review of basic addition and subtraction, measurements, and telling time. That foundation will be used to expand your skills in counting and reading numbers to 999 and how to understand place value. You will practice naming the parts of addition and subtraction problems. You will choose the correct operation for number sentences. In this LIFEPAC® ${ }^{\oplus}$ you will also practice the skills of number order, mental math, number types, and number words.

## 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 can remember addition and subtraction facts.
2. I can learn the meaning of digits.
3. I can count and read numbers to 999.
4. I know place value for ones, tens, and hundreds.
5. I can learn the names of addition and subtraction problems.
6. I can add and subtract on the number line.
7. I can add and subtract three-digit numbers and carry in addition to tens' place.
8. I can measure inches, feet, yards, and dozen.
9. I know operation symbols.,,$+-=, \neq,>,<$.
10. I know cardinal and ordinal numbers.
11. I can tell time on the clock and on the calendar.
12. I can read and write about the things I have learned.

## ADDITION AND SUBTRACTION TO 18 AND PLACE VALUE | Unit 1

## 1. ADD AND SUBTRACT TO 18

In this section, you will practice addition and subtraction skills. You will also learn about digits and practice pu

Review addition and subtraction facts.
1.1 Add.

| 8 | 4 | 5 | 6 | 8 | 7 | 8 | 9 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| +5 | +9 | +2 | +9 | +0 | +6 | +3 | +5 |


| 4 | 8 | 6 | 7 | 5 | 9 | 6 | 8 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | | 9 |
| ---: |
| +6 |$+4$


| 7 | 4 | 6 | 8 | 6 | 5 | 9 | 9 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | | 5 |
| ---: |
| +7 |


| 5 | 7 | 4 | 5 | 6 | 7 | 9 | 8 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | | 7 |
| ---: |
| +1 |


| 6 | 5 | 7 | 8 | 9 | 5 | 6 | 9 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | | 8 |
| ---: |
| +2 |


| 5 | 6 | 9 | 7 | 5 | 6 | 8 | 9 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| +6 | +8 | +0 | +5 | +9 | +7 | +6 | +4 |

1.2 Subtract.

| 13 | 13 | 7 | 15 | 8 | 13 | 11 | 14 | 10 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $-\mathbf{- 5}$ | $\underline{-9}$ | $\underline{-2}$ | $\underline{-9}$ | $\underline{-0}$ | $\underline{-6}$ | $\underline{-3}$ | $\underline{-5}$ | $\underline{-3}$ |


| 10 | 12 | 6 | 8 | 9 | 11 | 11 | 15 | 18 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $\underline{-6}$ | $\underline{-4}$ | $\underline{-0}$ | $\underline{-1}$ | $\underline{-4}$ | $\underline{-2}$ | $\underline{-5}$ | $\underline{-7}$ | $\underline{-9}$ |
|  |  |  |  |  |  |  |  |  |
| 14 | 11 | 7 | 10 | 12 | 5 | 12 | 15 | 12 |
| $\underline{-7}$ | $\underline{-7}$ | $\underline{-1}$ | $\underline{-2}$ | $\underline{-6}$ | $\underline{-0}$ | $\underline{-3}$ | $\underline{-6}$ | $\underline{-7}$ |


| 6 | 9 | 12 | 10 | 9 | 16 | 10 | 16 | 7 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| -1 | -2 | -8 | $\underline{-5}$ | $\underline{-3}$ | $\underline{-9}$ | $\underline{-1}$ | -8 | $\underline{-0}$ |
|  |  |  |  |  |  |  |  |  |
| 8 | 8 | 15 | 9 | 17 | 13 | 10 | 16 | 17 |
| -2 | -3 | -8 | -1 | $\underline{-8}$ | $\underline{-8}$ | $\underline{-4}$ | $\underline{-7}$ | $\underline{-9}$ |


| 11 | 14 | 9 | 12 | 14 | 13 | 14 | 13 | 11 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $-\mathbf{- 6}$ | $\underline{-8}$ | $\underline{-0}$ | $\underline{-5}$ | $\underline{-9}$ | $\underline{-7}$ | $\underline{-6}$ | $\underline{-4}$ | $\underline{-4}$ |

## ADDITION AND SUBTRACTION TO 18 AND PLACE VALUE | Unit 1

1.3 Write the missing numbers to 100.

| 0 | 1 |  | 3 | 4 |  |  | 7 | 8 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 11 |  | 13 | 14 | 15 |  | 17 |  | 19 |
| 20 |  | 22 |  | 24 |  | 26 |  | 28 | 29 |
|  | 31 | 32 |  |  | 35 | 36 | 37 |  | 39 |
| 40 | 41 |  | 43 |  | 45 |  | 47 | 48 |  |
| 50 |  | 52 | 53 | 54 |  | 56 |  |  | 59 |
|  | 61 |  | 63 | 64 |  | 66 | 67 | 68 |  |
| 70 |  | 72 |  |  | 75 |  | 77 | 78 | 79 |
|  | 81 | 82 | 83 | 84 |  | 86 |  | 88 |  |
| 90 |  |  | 93 |  | 95 |  | 97 | 98 | 99 |
| 100 |  |  |  |  |  |  |  |  |  |

Follow the pattern to answer the questions.
1.4 Write the number that comes after 100. $\qquad$
1.5 Write the numbers after 100 on the chart.

## Number Order

The number symbols you have learned are
$\begin{array}{llllllllll}0 & 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9\end{array}$
The number symbols are called digits. There are ten digits. We use ten digits to write all of our numbers.
We use digits to write small numbers.
We put digits together to write large numbers.

The way we put digits together tells us number order. The number chart is in number order. Number order is from small numbers to large numbers.

## Complete these activities.

1.6 Write each row of numbers in number order.

| 36 | 54 | 63 | 76 | 42 | 89 | 96 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15 | 51 | 39 | 50 | 68 | 12 | 86 |

1.7 Write the number before and the number after.
$\qquad$ 53 $\qquad$
$\qquad$ 40 $\qquad$ _ 67 $\qquad$
$\qquad$ 18 $\qquad$
$\qquad$
$\qquad$ 31 $\qquad$
$\qquad$ 89 $\qquad$
$\qquad$
$\qquad$1
$\qquad$
$\qquad$ 22 $\qquad$
12 $\qquad$
$\qquad$
1.8 Write the missing numbers.

$$
\begin{array}{cccccc}
34 & - & 36 & \square & & \\
97 & 98 & & & 101 & \\
97 & & & & &
\end{array}
$$

$\qquad$

## ADDITION AND SUBTRACTION TO 18 AND PLACE VALUE | Unit 1

Numbers can be written in digits or words. Read the numbers aloud.

| DIGITS | WORDS | DIGITS | WORDS | DIGITS | WORDS |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | one | 11 | eleven | 10 | ten |
| 2 | two | 12 | twelve | 20 | twenty |
| 3 | three | 13 | thirteen | 30 | thirty |
| 4 | four | 14 | fourteen | 40 | fourty |
| 5 | five | 15 | fifteen | 50 | fifty |
| 6 | six | 16 | sixteen | 60 | sixty |
| 7 | seven | 17 | seventeen | 70 | seventy |
| 8 | eight | 18 | eighteen | 80 | eighty |
| 9 | nine | 19 | nineteen | 90 | ninety |
| 10 | ten | 20 | twenty | 100 | one hundred |

We follow rules to write number words.
Starting at twenty-one, use a hyphen (-) to join tens' place and ones' place.
21 is twenty-one.
31 is thirty-one.
1.9 Write the number words on the line.
$\qquad$

7
30 93

19
36

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).
1.01 Add or subtract

| 2 | 5 | 7 | 3 | 9 | 8 | 3 | 2 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| +6 | +4 | +0 | +1 | $\underline{+4}$ | $\underline{+6}$ | $\underline{+3}$ | +8 |
|  |  |  |  |  |  |  |  |
| 12 | 6 | 9 | 13 | 15 | 4 | 7 | 17 |
| -7 | -2 | -3 | -6 | -8 | -0 | -2 | -9 |

1.02 Write the ten digits.
1.03 Write the numbers in number order.
12
76
47
35
67
$93 \quad 73$
41
1.04 Write the number words on the line.
$\left.\begin{array}{lll}13 & \square & 47 \\ 63 & 20 \\ 8 & \square & 95\end{array}\right]$

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