

THE ARITHMETIC CLASSROOM



SUBTRACTION
Whole Numbers

by
Courses by
Computers, Inc.



STERLING SOFTWARE™

from

STERLING SWIFT PUBLISHING COMPANY

SUBTRACTION

WHOLE NUMBERS

THE ARITHMETIC CLASSROOM

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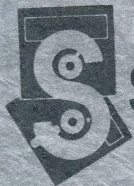
English Language Version

★ APPLE-BASED—48K/Applesoft firmware or language system, DOS 3.3

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THE ARITHMETIC CLASSROOM SUBTRACTION

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PUBLISHER'S PREFACE

I would like to share with you the reasons for our excitement about this software, THE ARITHMETIC CLASSROOM, which is the newest addition to our list of texts, teaching materials, and software/courseware.

First, the APPLE II is an educational tool which can be used with great success both in the home and in the schools. Therefore, a learning system specifically based on this microcomputer is a plus.

Second, THE ARITHMETIC CLASSROOM was developed by experienced, highly competent educators, Dr. Patricia Mullinix, Dr. Fawzy Ibrahim, and David McClintock, and every aspect of this system is testimony to this fact: Educationally sound, tutorially based software (which this is) becomes a strong motivating factor in children's learning.

Third, basic mathematical skills lend themselves particularly well to this kind of approach. THE ARITHMETIC CLASSROOM contains separate programs in Addition, Subtraction, Multiplication, Division, Fractions—Basic Concepts, Fractions—Addition and Subtraction, Fractions—Multiplication and Division, Decimals, and Math Games.

Fourth, the games included—"Slam Dunk Math," "Space War Math," and the "Gong Show"—are themselves motivating and will improve the student's abilities to add, subtract, multiply, divide, and handle fractions.

Fifth, THE ARITHMETIC CLASSROOM provides documentation to enable the student to begin using the software immediately. In the binder containing the system there are two sets of learner tests, five learner profiles (for the users to keep track of lessons mastered), and a complete set of answers. NOTE: feel free to make copies of the tests and student profile sheets, as needed.

In order for your learner to be able to determine the skills already mastered (so that you can be specific as to the lessons needed), there is available from the Publisher an "Inventory" (Placement Check) for both Whole Numbers and Fractions/Decimals.

These learning materials have been developed by teachers and tested extensively in classrooms. There is another version, "Elementary Mathematics Classroom Learning System"—Whole Numbers as well as Fractions/Decimals. These sets, used in schools, have a Management System by which teachers can keep track of the progress of their students.

There you have it. We at Swift Publishing Company think you will see dramatic results. I will appreciate hearing from you about this innovative software: Is it easily usable? Does it achieve the results you want? Please let me know.

Sincerely

Sterling A. Swift
Publisher

THE ARITHMETIC CLASSROOM

Subtraction

OVERVIEW

The Arithmetic Classroom has been developed for home and classroom use and, as suggested by its name, is a comprehensive arithmetic learning system. It is designed for use with an APPLE II Plus microcomputer, and consists of a total of eight self-contained but highly integrated learning packages — one for each of the following topics:

- **Addition**
- **Subtraction**
- **Multiplication**
- **Division**
- **Fractions — Basic Concepts**
- **Fractions — Addition & Subtraction**
- **Fractions — Multiplication & Division**
- **Decimals**

Each learning package contains a *lesson diskette*, a *practice workbook* and *achievement record forms* which are to be used to keep track of learning progress.

This package deals with *subtraction*, and it contains lessons at six levels of competence as illustrated on the next page:

Basic
Subtraction → 1
Facts

$$\begin{array}{r} 16 \\ - 9 \\ \hline \end{array}$$

Multi-digit
Subtraction, → 2
no regrouping
required

$$\begin{array}{r} 39 \\ - 26 \\ \hline \end{array}$$

Multi-digit
Subtraction, → 4
regrouping
required



$$\begin{array}{r} 54 \\ - 6 \\ \hline \end{array}$$

$$\begin{array}{r} 114 \\ - 83 \\ \hline \end{array}$$

$$\begin{array}{r} 2406 \\ - 634 \\ \hline \end{array}$$

USING THE SUBTRACTION DISK

There are no limits on the number of learners who can use this lesson disk. When a learner signs on, the following menu page appears:

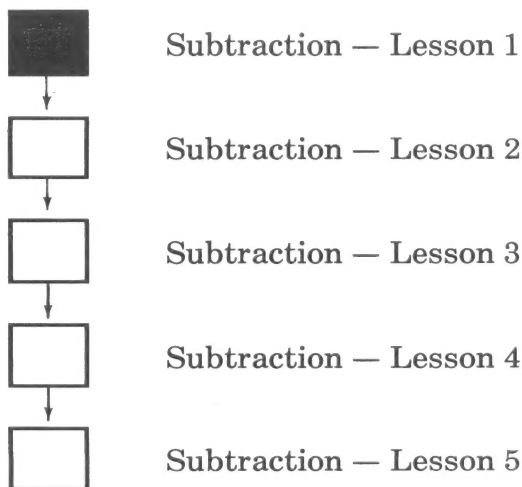
| |
|--|
| <p>1) Subtraction — Lesson 1</p> <p>2) Subtraction — Lesson 2</p> <p>3) Subtraction — Lesson 3</p> <p>4) Subtraction — Lesson 4</p> <p>5) Subtraction — Lesson 5</p> <p>Type the number of lesson you want. <input type="text"/></p> |
|--|

As indicated, the learner is free to choose the lesson he/she wants, but should be advised that the lessons must be studied and mastered *in sequence*; that is, the learner should be competent at level 1 before trying level 2, and so on. The same lesson can be studied numerous times without worry of repetition; indeed, it is to be expected that the learner will need to take the same lesson on several occasions before becoming proficient enough to continue on. This matter is very naturally taken care of by the way in which the lessons are designed.

LESSON DESIGN

Every lesson in the subtraction strand is structured in essentially the same way: examples are given for each lesson learning objective followed by related practice exercises, and every lesson concludes with a test that is intended to determine if mastery has been achieved. The last page the learner sees appears as follows:

(name), if you have not already done so,
shade the indicated block(s) on your graph.



In the example, the first block is shaded. This means that the mastery test for lesson 1 was taken and passed. Notice that the instruction is to shade the corresponding block on the student achievement record form that is provided. The purpose of this is to enable the learner to keep track of his/her progress in the subtraction strand.

HOW TO GET STARTED

The procedure for getting the subtraction disk ready for use is to:

- 1) Insert the disk in drive #1.
- 2) Turn on the TV/Monitor and computer in succession.

HARDWARE REQUIREMENTS

The hardware options for running the ARITHMETIC CLASSROOM are as follows:

Option #1

- APPLE II Plus with 48K
- One disk drive with DOS3.3

Option #2

- APPLE II with 48K
- APPLESOFT in ROM or Language Card
- AUTO-START in ROM
- One disk drive with DOS3.3

THE ARITHMETIC CLASSROOM

**Practice Exercises
For**

Subtraction

Practice Exercises for Subtraction Lesson #1

SKILL #1

Example:

$$15 - 9 = \boxed{6}$$

because $9 + 6 = 15$

1. $9 - 5 = \square$

because $\triangle + \square = \bigcirc$

2. $12 - 8 = \square$

because $\triangle + \square = \bigcirc$

3. $10 - 8 = \square$
because $\triangle + \square = \bigcirc$

4. $16 - 8 = \square$
because $\triangle + \square = \bigcirc$

5. $18 - 9 = \square$
because $\triangle + \square = \bigcirc$

6. $13 - 9 = \square$
because $\triangle + \square = \bigcirc$

7. $14 - 6 = \square$
because $\triangle + \square = \bigcirc$

8. $17 - 8 = \square$
because $\triangle + \square = \bigcirc$

9. $16 - 7 = \square$
because $\triangle + \square = \bigcirc$

10. $11 - 5 = \square$
because $\triangle + \square = \bigcirc$

SKILL #2

Example:

$$14 - \boxed{5} = 9$$

because

$$\boxed{5} + 9 = 14$$

1.

$$12 - \triangle = 3$$

because

$$\triangle + \square = \bigcirc$$

2.

$$\bigcirc - 4 = 9$$

because

$$\triangle + \square = \bigcirc$$

3.

$$15 - \triangle = 7$$

because

$$\triangle + \square = \bigcirc$$

4. $\bigcirc - 7 = 7$
 because $\triangle + \square = \bigcirc$

5. $11 - \triangle = 2$
 because $\triangle + \square = \bigcirc$

6. $\bigcirc - 9 = 8$
 because $\triangle + \square = \bigcirc$

7. $16 - \triangle = 7$
 because $\triangle + \square = \bigcirc$

8. $\bigcirc - 6 = 9$

because $\triangle + \square = \bigcirc$

9. $13 - \triangle = 7$

because $\triangle + \square = \bigcirc$

10. $\bigcirc - 6 = 6$

because $\triangle + \square = \bigcirc$

Minute Drill

Try to do all problems in one minute or less.

1. $9 - 3 = \square$

2. $7 - 2 = \square$

3. $11 - 8 = \square$

4. $10 - 9 = \square$

5. $14 - 5 = \square$

6. $8 - 4 = \square$

7. $16 - 9 = \square$

8. $15 - 6 = \square$

9. $13 - 5 = \square$

10. $17 - 9 = \square$

11. $14 - 8 = \square$

12. $6 - 0 = \square$

13. $9 - 5 = \square$

14. $12 - 7 = \square$

15. $18 - 9 = \square$

16. $13 - 7 = \square$

17. $15 - 8 = \square$

18. $16 - 8 = \square$

19. $12 - 3 = \square$

20. $10 - 7 = \square$

Minute Drill

Try to do all problems in one minute or less.

1. $9 - \square = 5$

2. $\square - 4 = 8$

3. $11 - \square = 7$

4. $\square - 6 = 8$

5. $8 - \square = 0$

6. $\square - 9 = 6$

7. $6 - \square = 6$

8. $\square - 3 = 9$

9. $16 - \square = 9$

10. $\square - 9 = 4$

11. $12 - \square = 7$

12. $\square - 1 = 9$

13. $17 - \square = 8$

14. $\square - 7 = 1$

Practice Exercises for Subtraction Lesson #2

SKILL #1

Example:

| | | |
|------|-----|------|
| TENS | | ONES |
| ↓ | ↓ | |
| | 49 | |
| | - 8 | |
| | — | |
| | 41 | |

1.
$$\begin{array}{r} 74 \\ - 3 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 16 \\ - 4 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 55 \\ - 2 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 19 \\ - 6 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 88 \\ - 5 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 73 \\ - 1 \\ \hline \end{array}$$

7.
$$\begin{array}{r} 39 \\ - 4 \\ \hline \end{array}$$

8.
$$\begin{array}{r} 57 \\ - 6 \\ \hline \end{array}$$

9.
$$\begin{array}{r} 66 \\ - 5 \\ \hline \end{array}$$

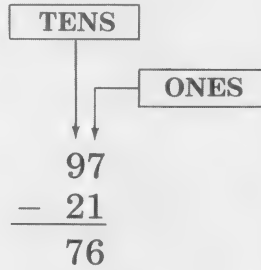
10.
$$\begin{array}{r} 95 \\ - 4 \\ \hline \end{array}$$

11.
$$\begin{array}{r} 49 \\ - 9 \\ \hline \end{array}$$

12.
$$\begin{array}{r} 27 \\ - 3 \\ \hline \end{array}$$

SKILL #2

Example:



1.
$$\begin{array}{r} 65 \\ - 33 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 38 \\ - 25 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 52 \\ - 10 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 67 \\ - 17 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 40 \\ - 20 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 92 \\ - 11 \\ \hline \end{array}$$

7.
$$\begin{array}{r} 86 \\ - 20 \\ \hline \end{array}$$

8.
$$\begin{array}{r} 76 \\ - 45 \\ \hline \end{array}$$

9.
$$\begin{array}{r} 48 \\ - 33 \\ \hline \end{array}$$

10.
$$\begin{array}{r} 28 \\ - 17 \\ \hline \end{array}$$

11.
$$\begin{array}{r} 87 \\ - 65 \\ \hline \end{array}$$

12.
$$\begin{array}{r} 97 \\ - 53 \\ \hline \end{array}$$

$$\begin{array}{r} 13. \quad 91 \\ - 68 \\ \hline \end{array}$$

$$\begin{array}{r} 14. \quad 62 \\ - 9 \\ \hline \end{array}$$

$$\begin{array}{r} 15. \quad 81 \\ - 77 \\ \hline \end{array}$$

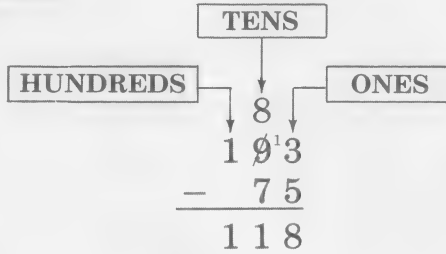
$$\begin{array}{r} 16. \quad 75 \\ - 9 \\ \hline \end{array}$$

$$\begin{array}{r} 17. \quad 50 \\ - 13 \\ \hline \end{array}$$

$$\begin{array}{r} 18. \quad 87 \\ - 9 \\ \hline \end{array}$$

SKILL #2

Example:



1.
$$\begin{array}{r} 392 \\ - 45 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 540 \\ - 4 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 151 \\ - 29 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 610 \\ - 8 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 961 \\ - 53 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 733 \\ - 14 \\ \hline \end{array}$$

7.
$$\begin{array}{r} 180 \\ - 36 \\ \hline \end{array}$$

8.
$$\begin{array}{r} 441 \\ - 5 \\ \hline \end{array}$$

9.
$$\begin{array}{r} 275 \\ - 49 \\ \hline \end{array}$$

10.
$$\begin{array}{r} 394 \\ - 6 \\ \hline \end{array}$$

11.
$$\begin{array}{r} 178 \\ - 59 \\ \hline \end{array}$$

12.
$$\begin{array}{r} 845 \\ - 36 \\ \hline \end{array}$$

13.
$$\begin{array}{r} 692 \\ - 68 \\ \hline \end{array}$$

14.
$$\begin{array}{r} 250 \\ - 13 \\ \hline \end{array}$$

15.
$$\begin{array}{r} 187 \\ - 9 \\ \hline \end{array}$$

Practice Exercises for Subtraction Lesson #4

SKILL #1

Example:

| | | |
|----------|-------------------|-------|
| HUNDREDS | TENS | ONES |
| ↓ | ↓ | ↓ |
| 8 | 9 ¹ 26 | - 734 |
| ----- | | |
| 192 | | |

1.
$$\begin{array}{r} 423 \\ - 351 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 707 \\ - 241 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 614 \\ - 93 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 522 \\ - 170 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 879 \\ - 88 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 115 \\ - 32 \\ \hline \end{array}$$

7.
$$\begin{array}{r} 400 \\ - 150 \\ \hline \end{array}$$

8.
$$\begin{array}{r} 518 \\ - 65 \\ \hline \end{array}$$

9.
$$\begin{array}{r} 826 \\ - 734 \\ \hline \end{array}$$

10.
$$\begin{array}{r} 505 \\ - 33 \\ \hline \end{array}$$

11.
$$\begin{array}{r} 738 \\ - 563 \\ \hline \end{array}$$

12.
$$\begin{array}{r} 343 \\ - 81 \\ \hline \end{array}$$

SKILL #2

Example:

| | | |
|-----------|---------------------------------|------|
| | HUNDREDS | |
| | ↓ | |
| THOUSANDS | ↓ | TENS |
| | ↓ | ↓ |
| | 5 ¹ 2 ¹ 1 | ↓ |
| | 6325 | ONES |
| | - 4387 | |
| | ----- | |
| | 1938 | |

1.
$$\begin{array}{r} 3120 \\ - 1824 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 7561 \\ - 793 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 7000 \\ - 2329 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 9432 \\ - 456 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 6325 \\ - 387 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 8000 \\ - 715 \\ \hline \end{array}$$

7.
$$\begin{array}{r} 5682 \\ - 1696 \\ \hline \end{array}$$

8.
$$\begin{array}{r} 4347 \\ - 558 \\ \hline \end{array}$$

9.
$$\begin{array}{r} 2010 \\ - 246 \\ \hline \end{array}$$

10.
$$\begin{array}{r} 9406 \\ - 3457 \\ \hline \end{array}$$

THE ARITHMETIC CLASSROOM

**Practice Exercises
For**

Subtraction

Practice Exercises for Subtraction Lesson #1

SKILL #1

Example:

$$15 - 9 = \boxed{6}$$

because $9 + 6 = 15$

1. $9 - 5 = \square$

because $\triangle + \square = \bigcirc$

2. $12 - 8 = \square$

because $\triangle + \square = \bigcirc$

3. $10 - 8 = \square$
because $\triangle + \square = \bigcirc$

4. $16 - 8 = \square$
because $\triangle + \square = \bigcirc$

5. $18 - 9 = \square$
because $\triangle + \square = \bigcirc$

6. $13 - 9 = \square$
because $\triangle + \square = \bigcirc$

7. $14 - 6 = \square$
because $\triangle + \square = \bigcirc$

8. $17 - 8 = \square$
because $\triangle + \square = \bigcirc$

9. $16 - 7 = \square$
because $\triangle + \square = \bigcirc$

10. $11 - 5 = \square$
because $\triangle + \square = \bigcirc$

SKILL #2

Example:

$$14 - 5 = 9$$

because

$$5 + 9 = 14$$

1.

$$12 - \triangle = 3$$

because

$$\triangle + \square = \bigcirc$$

2.

$$\bigcirc - 4 = 9$$

because

$$\triangle + \square = \bigcirc$$

3.

$$15 - \triangle = 7$$

because

$$\triangle + \square = \bigcirc$$

4. $\bigcirc - 7 = 7$
because $\triangle + \square = \bigcirc$

5. $11 - \triangle = 2$
because $\triangle + \square = \bigcirc$

6. $\bigcirc - 9 = 8$
because $\triangle + \square = \bigcirc$

7. $16 - \triangle = 7$
because $\triangle + \square = \bigcirc$

8. $\bigcirc - 6 = 9$

because $\triangle + \square = \bigcirc$

9. $13 - \triangle = 7$

because $\triangle + \square = \bigcirc$

10. $\bigcirc - 6 = 6$

because $\triangle + \square = \bigcirc$

Minute Drill

Try to do all problems in one minute or less.

1. $9 - 3 = \square$

2. $7 - 2 = \square$

3. $11 - 8 = \square$

4. $10 - 9 = \square$

5. $14 - 5 = \square$

6. $8 - 4 = \square$

7. $16 - 9 = \square$

8. $15 - 6 = \square$

9. $13 - 5 = \square$

10. $17 - 9 = \square$

11. $14 - 8 = \square$

12. $6 - 0 = \square$

13. $9 - 5 = \square$

14. $12 - 7 = \square$

15. $18 - 9 = \square$

16. $13 - 7 = \square$

17. $15 - 8 = \square$

18. $16 - 8 = \square$

19. $12 - 3 = \square$

20. $10 - 7 = \square$

Minute Drill

Try to do all problems in one minute or less.

1. $9 - \square = 5$

2. $\square - 4 = 8$

3. $11 - \square = 7$

4. $\square - 6 = 8$

5. $8 - \square = 0$

6. $\square - 9 = 6$

7. $6 - \square = 6$

8. $\square - 3 = 9$

9. $16 - \square = 9$

10. $\square - 9 = 4$

11. $12 - \square = 7$

12. $\square - 1 = 9$

13. $17 - \square = 8$

14. $\square - 7 = 1$

Practice Exercises for Subtraction Lesson #2

SKILL #1

Example:

$$\begin{array}{r} \text{TENS} \\ \downarrow \\ 49 \\ - 8 \\ \hline 41 \end{array}$$

$$\begin{array}{r} \text{ONES} \\ \downarrow \\ 49 \\ - 8 \\ \hline 41 \end{array}$$

1.
$$\begin{array}{r} 74 \\ - 3 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 16 \\ - 4 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 55 \\ - 2 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 19 \\ - 6 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 88 \\ - 5 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 73 \\ - 1 \\ \hline \end{array}$$

7.
$$\begin{array}{r} 39 \\ - 4 \\ \hline \end{array}$$

8.
$$\begin{array}{r} 57 \\ - 6 \\ \hline \end{array}$$

9.
$$\begin{array}{r} 66 \\ - 5 \\ \hline \end{array}$$

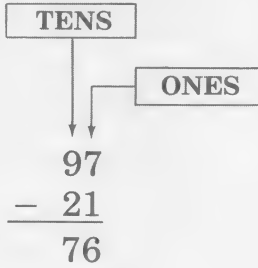
10.
$$\begin{array}{r} 95 \\ - 4 \\ \hline \end{array}$$

11.
$$\begin{array}{r} 49 \\ - 9 \\ \hline \end{array}$$

12.
$$\begin{array}{r} 27 \\ - 3 \\ \hline \end{array}$$

SKILL #2

Example:



1.
$$\begin{array}{r} 65 \\ - 33 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 38 \\ - 25 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 52 \\ - 10 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 67 \\ - 17 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 40 \\ - 20 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 92 \\ - 11 \\ \hline \end{array}$$

7.
$$\begin{array}{r} 86 \\ - 20 \\ \hline \end{array}$$

8.
$$\begin{array}{r} 76 \\ - 45 \\ \hline \end{array}$$

9.
$$\begin{array}{r} 48 \\ - 33 \\ \hline \end{array}$$

10.
$$\begin{array}{r} 28 \\ - 17 \\ \hline \end{array}$$

11.
$$\begin{array}{r} 87 \\ - 65 \\ \hline \end{array}$$

12.
$$\begin{array}{r} 97 \\ - 53 \\ \hline \end{array}$$

Practice Exercises for Subtraction Lesson #3

SKILL #1

Example:

| | | |
|--|----------------|------|
| | TENS | |
| | ↓ | |
| | 6 | |
| | 7 ¹ | ONES |
| | ↓ | |
| | 2 | |
| | — 3 7 | |
| | — | |
| | 3 5 | |

1.
$$\begin{array}{r} 82 \\ - 63 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 37 \\ - 8 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 66 \\ - 49 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 25 \\ - 8 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 20 \\ - 15 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 71 \\ - 6 \\ \hline \end{array}$$

7.
$$\begin{array}{r} 53 \\ - 36 \\ \hline \end{array}$$

8.
$$\begin{array}{r} 23 \\ - 9 \\ \hline \end{array}$$

9.
$$\begin{array}{r} 86 \\ - 47 \\ \hline \end{array}$$

10.
$$\begin{array}{r} 44 \\ - 8 \\ \hline \end{array}$$

11.
$$\begin{array}{r} 90 \\ - 27 \\ \hline \end{array}$$

12.
$$\begin{array}{r} 56 \\ - 8 \\ \hline \end{array}$$

$$\begin{array}{r} 13. \quad 91 \\ - 68 \\ \hline \end{array}$$

$$\begin{array}{r} 14. \quad 62 \\ - 9 \\ \hline \end{array}$$

$$\begin{array}{r} 15. \quad 81 \\ - 77 \\ \hline \end{array}$$

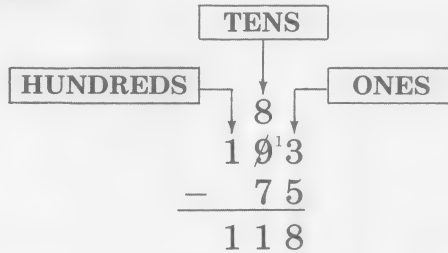
$$\begin{array}{r} 16. \quad 75 \\ - 9 \\ \hline \end{array}$$

$$\begin{array}{r} 17. \quad 50 \\ - 13 \\ \hline \end{array}$$

$$\begin{array}{r} 18. \quad 87 \\ - 9 \\ \hline \end{array}$$

SKILL #2

Example:



$$\begin{array}{r} 1. \quad 392 \\ - \quad 45 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 540 \\ - \quad \quad 4 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 151 \\ - \quad 29 \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 610 \\ - \quad \quad 8 \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 961 \\ - \quad 53 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 733 \\ - \quad 14 \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad 180 \\ - \quad 36 \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad 441 \\ - \quad \quad 5 \\ \hline \end{array}$$

$$\begin{array}{r} 9. \quad 275 \\ - \quad 49 \\ \hline \end{array}$$

$$\begin{array}{r} 10. \quad 394 \\ - \quad \quad 6 \\ \hline \end{array}$$

$$\begin{array}{r} 11. \quad 178 \\ - \quad 59 \\ \hline \end{array}$$

$$\begin{array}{r} 12. \quad 845 \\ - \quad 36 \\ \hline \end{array}$$

$$\begin{array}{r} 13. \quad 692 \\ - \quad 68 \\ \hline \end{array}$$

$$\begin{array}{r} 14. \quad 250 \\ - \quad 13 \\ \hline \end{array}$$

$$\begin{array}{r} 15. \quad 187 \\ - \quad \quad 9 \\ \hline \end{array}$$

Practice Exercises for Subtraction Lesson #4

SKILL #1

Example:

| | | |
|----------|----------------|-------|
| HUNDREDS | TENS | ONES |
| ↓ | ↓ | ↓ |
| | 8 | |
| | 9 ¹ | 2 6 |
| | - | 7 3 4 |
| | — | — |
| | 1 | 9 2 |

1.
$$\begin{array}{r} 423 \\ - 351 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 707 \\ - 241 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 614 \\ - 93 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 522 \\ - 170 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 879 \\ - 88 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 115 \\ - 32 \\ \hline \end{array}$$

7.
$$\begin{array}{r} 400 \\ - 150 \\ \hline \end{array}$$

8.
$$\begin{array}{r} 518 \\ - 65 \\ \hline \end{array}$$

9.
$$\begin{array}{r} 826 \\ - 734 \\ \hline \end{array}$$

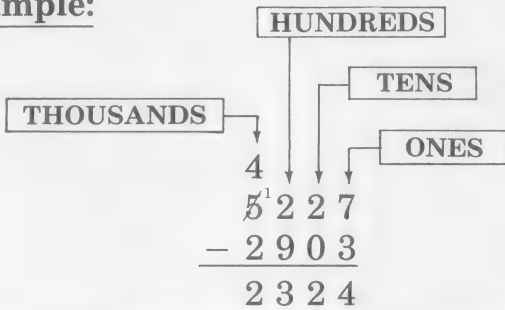
10.
$$\begin{array}{r} 505 \\ - 33 \\ \hline \end{array}$$

11.
$$\begin{array}{r} 738 \\ - 563 \\ \hline \end{array}$$

12.
$$\begin{array}{r} 343 \\ - 81 \\ \hline \end{array}$$

SKILL #2

Example:



1.
$$\begin{array}{r} 9098 \\ - 721 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 7157 \\ - 2515 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 8669 \\ - 734 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 6538 \\ - 1927 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 4538 \\ - 927 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 6807 \\ - 5906 \\ \hline \end{array}$$

7.
$$\begin{array}{r} 3385 \\ - 722 \\ \hline \end{array}$$

8.
$$\begin{array}{r} 2089 \\ - 1965 \\ \hline \end{array}$$

9.
$$\begin{array}{r} 1467 \\ - 702 \\ \hline \end{array}$$

10.
$$\begin{array}{r} 4585 \\ - 634 \\ \hline \end{array}$$

11.
$$\begin{array}{r} 9158 \\ - 1236 \\ \hline \end{array}$$

12.
$$\begin{array}{r} 7097 \\ - 354 \\ \hline \end{array}$$

Practice Exercises for Subtraction Lesson #5

SKILL #1

Example:

| | | | | | |
|-----------|----------------|---|----------------|------|--|
| | HUNDREDS | | | | |
| | | | TENS | | |
| THOUSANDS | | | | ONES | |
| | 6 | | 7 | | |
| | 7 ¹ | 3 | 8 ¹ | 0 | |
| | - 3 6 5 6 | | | | |
| | 3 7 2 4 | | | | |

1.
$$\begin{array}{r} 6704 \\ - 722 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 9126 \\ - 6840 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 7380 \\ - 676 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 5013 \\ - 4509 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 2284 \\ - 655 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 4050 \\ - 3239 \\ \hline \end{array}$$

7.
$$\begin{array}{r} 3234 \\ - 761 \\ \hline \end{array}$$

8.
$$\begin{array}{r} 8338 \\ - 1696 \\ \hline \end{array}$$

9.
$$\begin{array}{r} 7464 \\ - 936 \\ \hline \end{array}$$

10.
$$\begin{array}{r} 3391 \\ - 1744 \\ \hline \end{array}$$

11.
$$\begin{array}{r} 8571 \\ - 868 \\ \hline \end{array}$$

12.
$$\begin{array}{r} 9147 \\ - 8908 \\ \hline \end{array}$$

SKILL #2

Example:

| | | | | | |
|-----------|----------------|----------------|----------------|---|------|
| | HUNDREDS | | | | |
| | | | TENS | | |
| THOUSANDS | | | | | ONES |
| | 5 ¹ | 2 ¹ | 1 | | |
| | 6 | 3 | 2 ¹ | 5 | |
| | | | | | |
| | 4 | 3 | 8 | 7 | |
| | | | | | |
| | 1 | 9 | 3 | 8 | |

1.
$$\begin{array}{r} 3120 \\ - 1824 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 7561 \\ - 793 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 7000 \\ - 2329 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 9432 \\ - 456 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 6325 \\ - 387 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 8000 \\ - 715 \\ \hline \end{array}$$

7.
$$\begin{array}{r} 5682 \\ - 1696 \\ \hline \end{array}$$

8.
$$\begin{array}{r} 4347 \\ - 558 \\ \hline \end{array}$$

9.
$$\begin{array}{r} 2010 \\ - 246 \\ \hline \end{array}$$

10.
$$\begin{array}{r} 9406 \\ - 3457 \\ \hline \end{array}$$

THE ARITHMETIC CLASSROOM

Subtraction

Student Achievement Record

Subtraction — Lesson 1



Subtraction — Lesson 2



Subtraction — Lesson 3



Subtraction — Lesson 4



Subtraction — Lesson 5

Name _____



THE ARITHMETIC CLASSROOM

Subtraction

Student Achievement Record

| | |
|--------------------------|------------------------|
| <input type="checkbox"/> | Subtraction — Lesson 1 |
| ↓ | |
| <input type="checkbox"/> | Subtraction — Lesson 2 |
| ↓ | |
| <input type="checkbox"/> | Subtraction — Lesson 3 |
| ↓ | |
| <input type="checkbox"/> | Subtraction — Lesson 4 |
| ↓ | |
| <input type="checkbox"/> | Subtraction — Lesson 5 |

Name _____



THE ARITHMETIC CLASSROOM

Subtraction

Student Achievement Record

| | |
|--------------------------|------------------------|
| <input type="checkbox"/> | Subtraction — Lesson 1 |
| ↓ | |
| <input type="checkbox"/> | Subtraction — Lesson 2 |
| ↓ | |
| <input type="checkbox"/> | Subtraction — Lesson 3 |
| ↓ | |
| <input type="checkbox"/> | Subtraction — Lesson 4 |
| ↓ | |
| <input type="checkbox"/> | Subtraction — Lesson 5 |

Name _____



THE ARITHMETIC CLASSROOM

Subtraction

Student Achievement Record

Subtraction — Lesson 1



Subtraction — Lesson 2



Subtraction — Lesson 3



Subtraction — Lesson 4



Subtraction — Lesson 5

Name _____



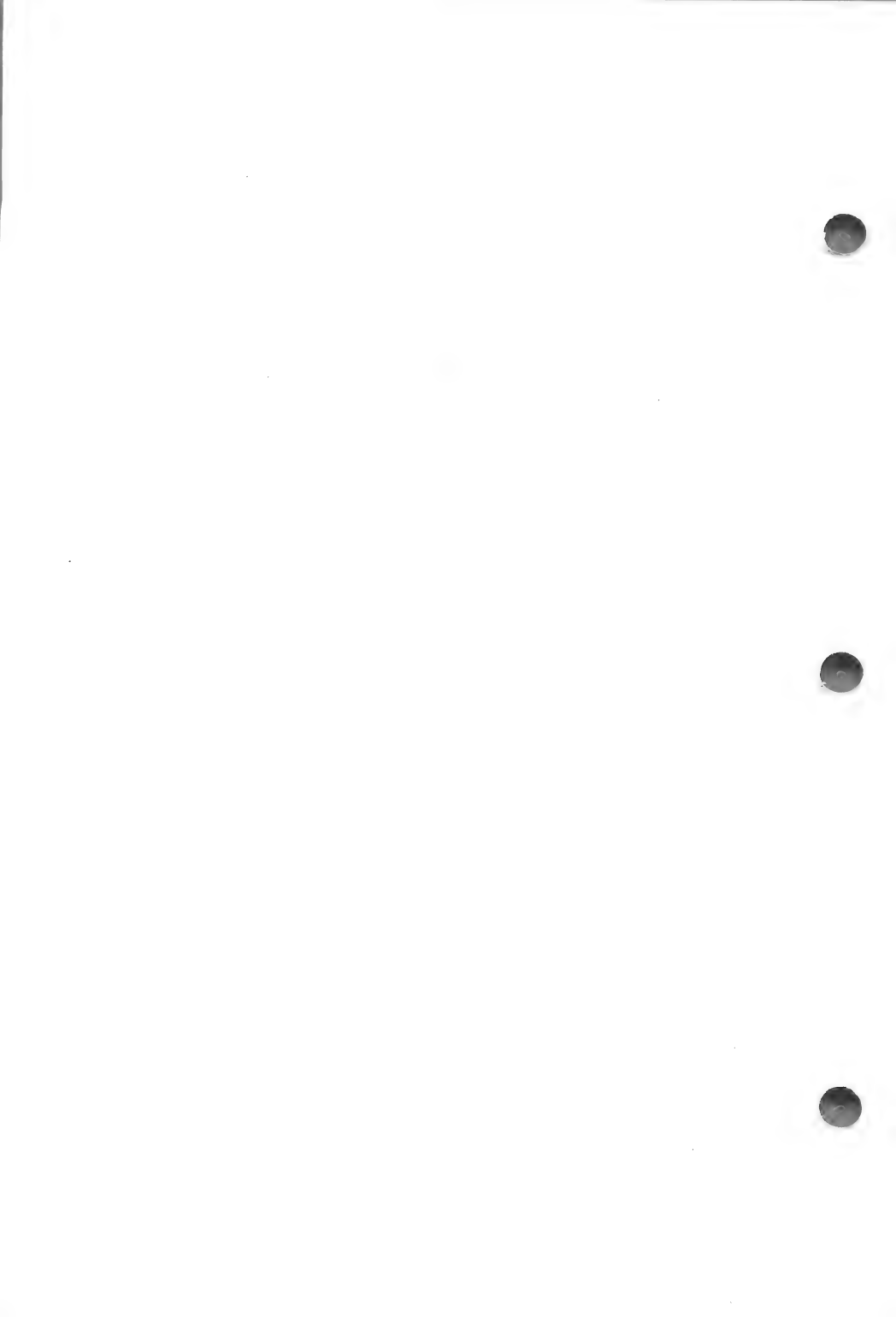
THE ARITHMETIC CLASSROOM

Subtraction

Student Achievement Record

| | |
|--------------------------|------------------------|
| <input type="checkbox"/> | Subtraction — Lesson 1 |
| ↓ | |
| <input type="checkbox"/> | Subtraction — Lesson 2 |
| ↓ | |
| <input type="checkbox"/> | Subtraction — Lesson 3 |
| ↓ | |
| <input type="checkbox"/> | Subtraction — Lesson 4 |
| ↓ | |
| <input type="checkbox"/> | Subtraction — Lesson 5 |

Name _____



Answer Key

Practice Exercises for Subtraction

LESSON #1:

SKILL #1

- | | |
|------|-------|
| 1. 4 | 2. 4 |
| 3. 2 | 4. 8 |
| 5. 9 | 6. 4 |
| 7. 8 | 8. 9 |
| 9. 9 | 10. 6 |

SKILL #2

- | | |
|------|--------|
| 1. 9 | 2. 13 |
| 3. 8 | 4. 14 |
| 5. 9 | 6. 17 |
| 7. 9 | 8. 15 |
| 9. 6 | 10. 12 |

MINUTE DRILL

- | | |
|-------|-------|
| 1. 6 | 2. 5 |
| 3. 3 | 4. 1 |
| 5. 9 | 6. 4 |
| 7. 7 | 8. 9 |
| 9. 8 | 10. 8 |
| 11. 6 | 12. 6 |
| 13. 4 | 14. 5 |
| 15. 9 | 16. 6 |
| 17. 7 | 18. 8 |
| 19. 9 | 20. 3 |

MINUTE DRILL

- | | |
|-------|--------|
| 1. 4 | 2. 12 |
| 3. 4 | 4. 14 |
| 5. 8 | 6. 15 |
| 7. 0 | 8. 12 |
| 9. 7 | 10. 13 |
| 11. 5 | 12. 10 |
| 13. 9 | 14. 8 |

LESSON #2

SKILL #1

- | | | |
|--------|--------|--------|
| 1. 71 | 2. 12 | 3. 53 |
| 4. 13 | 5. 83 | 6. 72 |
| 7. 35 | 8. 51 | 9. 61 |
| 10. 91 | 11. 40 | 12. 24 |

SKILL #2

- | | | |
|--------|--------|--------|
| 1. 32 | 2. 13 | 3. 42 |
| 4. 50 | 5. 20 | 6. 81 |
| 7. 66 | 8. 31 | 9. 15 |
| 10. 11 | 11. 22 | 12. 44 |

LESSON #3

SKILL #1

| | | |
|--------|--------|--------|
| 1. 19 | 2. 29 | 3. 17 |
| 4. 17 | 5. 5 | 6. 65 |
| 7. 17 | 8. 14 | 9. 39 |
| 10. 36 | 11. 63 | 12. 48 |
| 13. 23 | 14. 53 | 15. 4 |
| 16. 66 | 17. 37 | 18. 78 |

SKILL #2

| | | |
|---------|---------|---------|
| 1. 347 | 2. 536 | 3. 122 |
| 4. 602 | 5. 908 | 6. 719 |
| 7. 144 | 8. 436 | 9. 226 |
| 10. 388 | 11. 119 | 12. 809 |
| 13. 624 | 14. 237 | 15. 178 |

LESSON #4

SKILL #1

| | | |
|---------|---------|---------|
| 1. 72 | 2. 466 | 3. 521 |
| 4. 352 | 5. 791 | 6. 83 |
| 7. 250 | 8. 453 | 9. 92 |
| 10. 472 | 11. 175 | 12. 262 |

SKILL #2

| | | |
|-----------|-----------|-----------|
| 1. 8,377 | 2. 4,642 | 3. 7,935 |
| 4. 4,611 | 5. 3,611 | 6. 901 |
| 7. 2,663 | 8. 124 | 9. 765 |
| 10. 3,951 | 11. 7,922 | 12. 6,743 |

LESSON #5

SKILL #1

- | | | |
|-----------|-----------|----------|
| 1. 5,982 | 2. 2,286 | 3. 6,704 |
| 4. 504 | 5. 1,629 | 6. 811 |
| 7. 2,473 | 8. 6,642 | 9. 6,528 |
| 10. 1,647 | 11. 7,703 | 12. 239 |

SKILL #2

- | | | |
|-----------|----------|----------|
| 1. 1,296 | 2. 6,768 | 3. 4,671 |
| 4. 8,976 | 5. 5,938 | 6. 7,285 |
| 7. 3,986 | 8. 3,789 | 9. 1,764 |
| 10. 5,949 | | |



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