

# Placement Testing

## Two Methods

There are two placement methods. You will use one of the methods to place students into the program.

The first and preferred method is to administer the **Corrective Mathematics** Comprehensive Placement Test, which is available on pages 31–35 and at [sraonline.com](http://sraonline.com).

The second placement method is to administer the preskill and placement tests that accompany each module. The preskill tests will determine whether a student should be placed in a particular module and, if so, at which lesson. Do not give these tests if you have already given the Comprehensive Placement Test.

- The Comprehensive Placement Test, found on page 31 of this guide and at [sraonline.com](http://sraonline.com), provides a short screening tool for placing students in SRA's **Corrective Mathematics** series. It will determine the correct entry point, both module and lesson, for each student. Most students enter **Corrective Mathematics** based on the results of the Comprehensive Placement Test.
- The module-specific tests and pretests are found in the corresponding Teacher's Presentation Book and at [sraonline.com](http://sraonline.com). The preskill test indicates whether students have the prerequisite skills needed to work in the module. The placement tests indicate which entry point is appropriate or whether students are too advanced to be placed in the module. Because placement tests indicate whether students have mastered the skills taught in the module, they can also be used as pre- and post-tests to assess growth.

The module-specific tests are used in place of the Comprehensive Placement Test if you are considering using one module to address a previously identified skill deficit. They can also be used to confirm results of the Comprehensive Placement Test if you question students' performance on the shorter screening instrument.

- The Comprehensive Placement Test will determine the module in which the students should begin the **Corrective Mathematics** series and the specific lesson on which the students should start. The test will also identify those students who are too advanced for any of the **Corrective Mathematics** modules as well as those students who are too low for any module in the series.

With one exception, all the tests are written tests that may be administered individually or to a group. The exception is the Addition Preskill Test. It is given to students who make many errors on the placement test that accompanies the *Addition* module or on the addition portion of the Comprehensive Placement Test. The Addition Preskill Test is an oral test and must be administered individually. It is designed to identify those students who are too low for any module in the **Corrective Mathematics** series.

There are two points to keep in mind when using either placement method. Students who do poorly on the placement test but have previously done well on the mathematics portion of any standardized achievement test should be reevaluated after a week or two of instruction. If these students are doing exceptionally well in the series, readminister the placement test. A skip to a later lesson or to a more advanced module might be indicated.

A second caution involves older students who test into the *Addition* module only because of difficulties with story problems. These students should be placed in the *Subtraction* module rather than in the *Addition* module.

# Comprehensive Placement Test for Corrective Mathematics

The *Corrective Mathematics* Comprehensive Placement Test provides a gauge for placing students in SRA's *Corrective Mathematics* series. The Comprehensive Placement Test will determine the correct entry point (both module and lesson) for each student. If the Comprehensive Placement Test is used, it's not necessary to administer the preskill test or the placement tests that are included in the Workbook of each module.

For your convenience, the test is divided into two sections. **Section I** includes: Part A, Addition; Part B, Subtraction; Part C, Multiplication; and Part D, Division. **Section II** includes: Part E, Basic Fractions; Part F, Fractions, Decimals, and Percents; and Part G, Ratios and Equations.

## Section I

During two sessions, administer the test either to the entire group or to individuals.

- During the first session, the students will work Parts A and B of the test (addition and subtraction). Allow 20 minutes for this session.
- Give Parts C and D only to those students who make no more than one error on Part A or B. Allow 20 minutes for the second session.

## Administration and Scoring of Section I

### Step 1

- Make copies of the Comprehensive Placement Test pages for Parts A–D. Distribute the copies.
- Tell the students not to start until you instruct them to start.
- Ask the students to fill in the information called for at the top of the test.

### Step 2

- (Tell the students:)  
You're going to work Parts A and B of the test today. You'll have 20 minutes.

- Do all the problems you can. Work the problems right on the test sheet. If you have trouble with a problem, skip it and go on to the next problem.
- Read each problem carefully before you work it.
- Remember to do only Parts A and B. Start now.
- (After 20 minutes, tell the students to stop and hand in their tests.)

### Step 3

Grade Parts A and B. There are 11 scorable items in Part A and 13 scorable items in Part B.

Look at the answer key that follows. Notice that there is more than one scorable item for some of the problems the students work.

- For all column problems, each column is scored separately. Each column on the answer key is labeled as an item. The answer for each item is in boldface. The first problem counts as one item because there is only one column. The sixth problem counts as four items (8, 9, 10, 11) because there are four columns.
- Each story problem counts as one item.

## Answer Key Part A Addition

(Problem 1)

items	①	②	③	④	⑤
	7	9	4	2	3
	+ 1	+ 1	+ 1	3	2
	<b>8</b>	<b>10</b>	<b>5</b>	5	0
				+ 2	+ 1
				<b>12</b>	<b>6</b>

(Problem 6)

items	⑥	⑦	⑧	⑨	⑩	⑪
	3	1	1	3	9	3
	2	2		6	1	6
	5	2	9	4	8	2
			+	4	3	4
	+ 4	1	<b>11</b>	<b>9</b>	<b>2</b>	<b>5</b>
	<b>14</b>	<b>6</b>				

**Answer Key**  
**Part B Subtraction**

items ①      ②      ③                      ④   ⑤

$$\begin{array}{r} 4 \quad 8 \quad 3 \qquad \qquad \qquad 7 \quad 6 \\ - \quad \quad \quad \quad \quad \quad \quad 1 \quad 8 \\ \hline 5 \quad 8 \end{array}$$

items ⑥   ⑦                      ⑧   ⑨

$$\begin{array}{r} 6 \quad 2 \qquad \qquad \qquad 9 \quad 4 \\ - \quad 5 \qquad \qquad \quad - 2 \quad 8 \\ \hline 5 \quad 7 \qquad \qquad \quad 6 \quad 6 \end{array}$$

items ⑩      ⑪      ⑫      ⑬

234    176    128    154

- Count the errors for Part A, and enter the total in the box following the heading “Errors” on the student’s test packet.
- Count the errors for Part B, and enter the total in the box following the heading “Errors” on the student’s test packet
- Do not administer Parts C and D of the Comprehensive Placement Test to the students who make more than one error on Part A or B. Place those students in either the *Addition* or the *Subtraction* module. See the Placement Directions for specific placement instructions.

**Step 4**

- Arrange another testing session, and present Parts C and D of the Comprehensive Placement Test. Follow the procedure outlined in Steps 1 and 2. Allow the students up to 20 minutes to complete the test.

**Step 50**

- Grade Parts C and D of the Comprehensive Placement Test. Notice that on these parts the entire answer to each problem counts as one item. Unit names are not required.

**Answer Key**  
**Part C Multiplication**

15      8      27 or 27 hours  
9 or 9 miles      12 or 12 chairs  
387    90    10,935    2106    10,560

**Part D Division**

4   3                      8 or 8 days  
4 or 4 hours    4 or 4 times  
34 R2                      24    56 R6  
60 R27                      28 R58

**Step 6**

- Place students who make more than one error on Parts C or D in either the *Multiplication* or the *Division* module. (See Placement Directions.)
- If students make no more than one error on either Part C or D, have them take Parts E, F, and G of the Comprehensive Placement Test. See page 29 for directions.

**Placement Directions for**  
**Corrective Mathematics:**  
**Addition, Subtraction, Multiplication,**  
**and Division**

**Part A—Addition**

Total Errors	Lesson
8, 9, 10, or 11	Administer the <i>Addition</i> Preskill Test on page 28. Begin with Lesson 1 if Preskill Test is passed.
6 or 7	Present Transition Lesson 8 in the <i>Addition</i> Teacher’s Presentation Book, and then begin instruction in the <i>Addition</i> module at Lesson 8.
2, 3, 4, or 5	Present Transition Lesson 23 in the <i>Addition</i> Teacher’s Presentation Book, and then begin instruction in the <i>Addition</i> module at Lesson 23.
0 or 1	These students are too proficient for the <i>Addition</i> module. See the chart to determine whether they should be placed in the <i>Subtraction</i> module.

## The Addition Preskill Test

The Addition Preskill Test is given to students who made 8 or more errors on Part A of the Placement Test. This test is individually administered and requires about five minutes. It tests students on their ability to count and to identify two-digit numbers. Students who make no more than one error on each section of the test should enter the module at Lesson 1. Students who exceed the error limit should not be placed in the module. *Distar*<sup>®</sup>, *Arithmetic I* or *Connecting Math Concepts* would be more appropriate for these students.

Following is the script that should be used for administering the Addition Preskill Test.

### Part A

- a. (Write the following numbers on the board or on a sheet of paper:)

17 32 18 56 90 12 39 81

- b. (Point to 17.) **Read the number.** (Signal.)  
17.  
c. (Repeat step b for the rest of the numbers.)

### Part B

- a. **I'm going to count. When I stop counting I want you to keep counting until I tell you to stop.**  
b. **7, 8, 9.** (Stop the students when they reach 15.)  
c. **16, 17, 18.** (Stop the students when they reach 22.)  
d. **36, 37, 38.** (Stop the students when they reach 41.)  
e. **88, 89.** (Stop the students when they reach 93.)

## Part B—Subtraction

Total Errors	Lesson
11, 12, or 13	Begin with Lesson 1 in the <i>Subtraction</i> module.
5, 6, 7, 8, 9, or 10	Present Transition Lesson 8 in the <i>Subtraction</i> Teacher's Presentation Book, and then begin instruction in the <i>Subtraction</i> module at Lesson 8.
2, 3, or 4	Present Transition Lesson 25 in the <i>Subtraction</i> Teacher's Presentation Book, and then begin instruction in the <i>Subtraction</i> module at Lesson 25.
0 or 1	These students are too proficient for the <i>Subtraction</i> module. Test the students on Parts C and D of the Comprehensive Placement Test.

## Part C—Multiplication

Total Errors	Lesson
9 or 10	Begin with Lesson 1 in the <i>Multiplication</i> module.
5, 6, 7, or 8	Present Transition Lesson 10 in the <i>Multiplication</i> Teacher's Presentation Book, and then begin instruction in the <i>Multiplication</i> module at Lesson 10.
2, 3, or 4	Present Transition Lesson 27 in the <i>Multiplication</i> Teacher's Presentation Book, and then begin instruction in the <i>Multiplication</i> module at Lesson 25.
0 or 1	These students are too proficient for <i>Multiplication</i> . See the following chart to determine whether they should be placed in <i>Division</i> .

## Part D—Division

Total Errors	Lesson
9 or 10	Begin with Lesson 1 in the <i>Division</i> module.
5, 6, 7, or 8	Present Transition Lesson 6 in the <i>Division</i> Teacher's Presentation Book, and then begin instruction in the <i>Division</i> module at Lesson 6.
2, 3, or 4	Present Transition Lesson 27 in the <i>Division</i> Teacher's Presentation Book, and then begin instruction in the <i>Division</i> module at Lesson 27.
0 or 1	These students are too proficient for the <i>Division</i> module. Test the students on Section II (Parts E, F, G) of the Comprehensive Placement Test.

## Section II

During one session, administer the test either to the entire group or to individuals.

### Administration and Scoring of Section II

#### Step 1

- Make copies of the Comprehensive Placement Test pages for Parts E–G. Distribute the copies.
- Tell the students not to start until you instruct them to start.
- Ask the students to fill in the information called for at the top of the test.

#### Step 2

- (Tell the students:) **You're going to work Parts E, F, and G of the test today. You'll have 40 minutes to complete the test.**
- You may work the problems on a separate sheet of paper, but be sure to write your answers on the test.
- Do all the problems you can. Work the problems right on the test sheet. If you have trouble with a problem, skip it and go on to the next problem.
- Read each problem carefully before you work it.

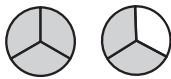
- Start now.
- (After 40 minutes, tell the students to stop and hand in their tests.)

#### Step 3

Grade Section II. Notice that in Part G the answers are not incorrect if the student did not include the word as part of the answer.

#### Answer Key

##### Part E Basic Fractions

1.  2.  $\frac{6}{7}$  3.  $\frac{8}{8}$  or 1
4.  $\frac{6}{4}$  or  $\frac{3}{2}$  or  $1\frac{2}{4}$  or  $1\frac{1}{2}$  5.  $\frac{8}{7}$  or  $1\frac{1}{7}$
6.  $\frac{23}{4}$  7.  $\frac{22}{5}$  8.  $\frac{27}{10}$  or  $2\frac{7}{10}$

##### Part F Fractions, Decimals, and Percents

1.  $\frac{17}{6}$  or  $2\frac{5}{6}$  2.  $\frac{2}{3}$  3.  $3\frac{3}{4}$
4.  $\frac{6}{8}$  or  $\frac{3}{4}$  5. 20 6. 11.529
7. 87.5% or  $87\frac{1}{2}\%$

##### Part G Ratios and Equations

1.  $\frac{21}{20}$  or  $1\frac{1}{20}$  or 1.05 meters
2.  $\frac{350}{12}$  or  $29\frac{2}{12}$  or  $29\frac{1}{6}$  meters
3.  $6R = 18$  or  $R = 3$ ,  $6R = 18$
4. 60
5.  $\frac{10}{3}$  or  $3\frac{1}{3}$  or 3.33 meters

**Placement Directions for *Corrective Mathematics: Basic Fractions; Fractions, Decimals, and Percents; and Ratios and Equations***

**Part E—Basic Fractions**

Total Errors	Lesson
6, 7, or 8	Begin with Lesson 1 in <i>Basic Fractions</i> .
4 or 5	Begin with Lesson 19 in <i>Basic Fractions</i> .
2 or 3	Begin with Lesson 30 in <i>Basic Fractions</i> .
0 or 1	These students are too proficient for <i>Basic Fractions</i> . See the following chart to determine whether they should be placed in <i>Fractions, Decimals, and Percents</i> .

**Part F—Fractions, Decimals, and Percents**

Total Errors	Lesson
5, 6, or 7	Begin with Lesson 1 in <i>Fractions, Decimals, and Percents</i> .
2, 3, or 4	Begin with Lesson 30 in <i>Fractions, Decimals, and Percents</i> .
0 or 1	These students are too proficient for <i>Fractions, Decimals, and Percents</i> .  See the following chart to determine whether they should be placed in <i>Ratios and Equations</i> .

**Part G—Ratios and Equations**

Total Errors	Lesson
3, 4, or 5	Begin with Lesson 1 in <i>Ratios and Equations</i> .
0, 1, or 2	These students are too proficient for <i>Ratios and Equations</i> .

# Corrective Mathematics

## Comprehensive Placement Test

### Section I Parts A and B

Name \_\_\_\_\_ Class \_\_\_\_\_ Date \_\_\_\_\_

School \_\_\_\_\_ Tester \_\_\_\_\_

#### Part A

Errors

7	9	4	23	31	1393
<u>+ 1</u>	<u>+ 1</u>	<u>+ 1</u>	32	22	616
			50	52	9482
			<u>+ 21</u>	<u>+ 41</u>	<u>+ 434</u>

#### Part B

Errors

5	9	6	76	62	94
<u>- 1</u>	<u>- 1</u>	<u>- 3</u>	<u>- 18</u>	<u>- 5</u>	<u>- 28</u>

There are 189 red cars and 423 blue cars.  
How many more blue cars are there than red cars?

The shop gave away 86 apples. The shop gave away 90 oranges.  
How many pieces of fruit did the shop give away?

Ann found 206 pencils. 78 of the pencils were broken.  
How many of the pencils were not broken?

146 girls go to our school. There are 300 children altogether in our school.  
How many boys go to our school?

**Stop.**

# Corrective Mathematics

## Comprehensive Placement Test

### Section I Part C

Name \_\_\_\_\_ Class \_\_\_\_\_ Date \_\_\_\_\_

School \_\_\_\_\_ Tester \_\_\_\_\_

#### Part C

Errors

$$\begin{array}{r} 5 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ \times 4 \\ \hline \end{array}$$

Jill worked 3 hours every day. She worked 9 days.  
How many hours did she work altogether?

Ann ran 5 miles on Monday. Then she ran 4 miles on Tuesday.  
How many miles did she run altogether?

There are 3 chairs in each row. There are 4 rows of chairs.  
How many chairs are there altogether?

$$\begin{array}{r} 43 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 45 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 405 \\ \times 27 \\ \hline \end{array}$$

$$\begin{array}{r} 54 \\ \times 39 \\ \hline \end{array}$$

$$\begin{array}{r} 264 \\ \times 40 \\ \hline \end{array}$$



# Corrective Mathematics Comprehensive Placement Test

## Section I Part D

Name \_\_\_\_\_ Class \_\_\_\_\_ Date \_\_\_\_\_

School \_\_\_\_\_ Tester \_\_\_\_\_

### Part D

Errors

$3\overline{)12}$

$9\overline{)27}$

5 buses left Midville each day. 40 buses left in all.  
How many days did buses leave Midville?

Fred typed 2 pages each hour. He typed 8 pages.  
How many hours did he type?

Every time Betty went jogging, she ran 5 blocks.  
She ran 20 blocks. How many times did she go  
jogging?

$3\overline{)104}$

$9\overline{)216}$

$48\overline{)2694}$

$54\overline{)3267}$

$82\overline{)2354}$

**Stop.**

# Corrective Mathematics

## Comprehensive Placement Test

### Section II Parts E and F

Name \_\_\_\_\_ Class \_\_\_\_\_ Date \_\_\_\_\_

School \_\_\_\_\_ Tester \_\_\_\_\_

#### Part E

Errors

1. Draw the picture for the fraction.

$$\frac{5}{3} = \bigcirc \bigcirc$$

2.  $\frac{4}{7} + \frac{2}{7} =$

3.  $\frac{10}{8} - \frac{2}{8} =$

4.  $\frac{2}{4} \times 3 =$

5.  $\frac{2}{7} \times 4 =$

6.  $5\frac{3}{4} = \frac{\quad}{4}$

7.  $4\frac{2}{5} = \frac{\quad}{5}$

8.  $4\frac{1}{2} \times \frac{3}{5} =$

#### Part F

Errors

1.  $2\frac{1}{2} + \frac{1}{3}$

2. Reduce this fraction

$$\frac{14}{21} =$$

3. Write this fraction as a mixed number.

$$\frac{15}{4} =$$

4.  $\frac{3}{8} \div \frac{1}{2}$

5.  $\frac{4}{\square} \times \frac{3}{15}$

6.  $3.52 + 6 + 2.009 =$

7.  $\frac{7}{8} =$  %

# ***Corrective Mathematics***

## **Comprehensive Placement Test**

### **Section II Part G**

Name \_\_\_\_\_ Class \_\_\_\_\_ Date \_\_\_\_\_

School \_\_\_\_\_ Tester \_\_\_\_\_

#### **Part G**

Errors

1. An oak tree is 5 meters high and makes a  $\frac{3}{4}$  meter shadow. A maple tree is 7 meters high. How many meters is its shadow?
  
2. Pam runs 50 meters in 12 seconds, how far can she run in 7 seconds?
  
3.  $3.5R = 10.5$   
Figure out what  $6R$  equals.
  
4. 15% of what number is 9?
  
5. If 3 boxes contain  $2\frac{1}{2}$  meters of wire, how long is the wire in 4 boxes?

**Stop.**