

Assessment Procedures: Ratios and Rates Form A and Form B

General Information

This set of procedures provides the information teachers need to administer both forms of the Ratios and Rates Test.

Rationale for the Test

This module contains two alternate, equivalent forms of the progress-monitoring measure. Form A is the pretest and Form B the posttest for each module. The advantage of this approach is to provide a starting and ending point for documenting student progress for each module. Use student responses and observations during the module to identify content to readdress or investigate further for student success.

General Testing Information

Forms A and B are untimed; however, most students take between 20 and 40 minutes to complete one form. Timing is broken down as follows:

- Materials distribution, 5 minutes
- Demonstrate, 1 minute
- Practice, 1 minute

- Form A or B, untimed but estimated to take about 20 minutes
- Pickup, 2 minutes

Examiners should have the following materials:

- Overhead projector, transparencies of Demonstrate pages, and dry-erase pen for demonstrations
- Student test booklets, Form A or Form B
- Assessment Procedures

Test Sections

Demonstrate:

The Demonstrate section is designed to model the testing task and how to mark answers. Do not use this section to teach the measured constructs. Demonstrations occur at the beginning of the test.

Practice:

Practice items give students an opportunity to answer a variety of problem types that appear on the test. The purpose of the Practice items is to familiarize the students with the format of the test. Do not score or teach the Practice items. Answer questions about the format of the test but do not answer questions about the accuracy of the responses.

Test:

Students individually complete these items, which are scored.

General Comments

- Students may accidentally skip a page of test items. If students finish early, check whether they have completed all items.
- Some students do not perform well in large-group testing situations or have accommodations for small-group testing. If small-group testing is needed, use the same instructions as for large-group testing.
- If students show signs of frustration or refuse to proceed, collect their materials

and either test them later in small groups or individually. If during the individual or small-group testing the student continues to be frustrated, stop testing. Discontinue testing for students who are clearly distraught.

- Keep all students' full attention during testing.
- Watch for students looking at other students' work. Remind them that they are to do their own work, not their neighbor's.
- If students answer questions aloud, or "think out loud," remind them to "think in your head, not out loud."

Specific Administration Instructions

Do not read aloud the words in *italics*, which are instructions for the test administrator; read aloud the words in **bold** verbatim to students. Read the instructions several times before testing to become familiar with the content.

Demonstrate

- *Show the Demonstrate overhead transparency.*
- **Turn to page 1 in your testing booklet. This test will assess your knowledge of ratios and rates. There are several different types of questions, with different directions for each type. Be sure to read the directions carefully.**
- **The first question asks, “What is the ratio of shirts to pants?”** *Select a student to provide the answer. Correct, I circle “C” for “8 to 3,” because there are 8 shirts and 3 pairs of pants.*
- **Look at the second problem. This problem says, “Complete the table to calculate the equivalent rate.”** *Select a student to provide the answer. Yes, the correct answer is “D” for “ $\frac{18}{6}$,” so I circle the letter “D,” because the equivalent rate is $\frac{18}{6}$.*
- **Look at the third problem. It says, “Directions: Choose the correct model and ratio for the scenario below. There are 6 basketballs and 5 footballs. What is the ratio of footballs to total balls?”** *Select a student to provide the answer. Correct, I circle “C” for “5:11,” because it has the correct ratio and correct model.*
- **Look at the last problem. It states, “Frank’s aunt made him 14 cookies and 6 cupcakes. What is the rate of cookies to cupcakes?”** *Select a student to provide the answer. Yes, the correct answer is “A” for “ $\frac{14}{6}$,” so I circle letter “A,” because it shows the correct model and correct rate.*

Practice

- *Set the timer for 30 seconds.*

- Turn to page 2 in your testing booklet. In this section, you will practice the various types of questions that appear on the test. When I say, “Begin,” you will have 30 seconds to answer these questions by circling the letter that goes with your answer. When I say, “Stop,” stop and put your pencil down.
- **Ready? Begin.** *Start the timer.*
- *After the timer goes off, ask for any questions and address them before going to the next section. Remember, do not respond to the correctness of any response; use this time only to respond to questions about the format of the test and how to mark answers.*

Test

- Turn to page 3 in your testing booklet. These are your test items. This section is untimed. Remember, there are several different types of questions. Be sure to read each question carefully. You may write in your test booklet. For each item, circle the letter that goes with your answer. When you are finished with your test, go back and make sure you answered every question. Then, bring your test booklet to me.
- **Ready? Begin.**
- *As students work, walk around the room to confirm that students are following the directions. As students finish, check that they have answered all of the questions.*
- *This concludes the Ratios and Rates Test administration. Collect all testing materials.*

Scoring the Test

A scoring form is provided for Form A and Form B. The first column contains the item number. The second column shows the correct answer for the corresponding item. In the third column, write the answer the student marked. Any student answer that does not match the correct answer is incorrect. The last column identifies the lesson(s) containing content associated with each item.

Compare scores from Form A at the beginning of the intervention to scores from Form B at the end of the intervention to monitor student growth and progress.

Student Name: _____

Date: _____

Ratios and Rates Test

Scoring Form • Form A

Item Number	Correct Answer	Student Answer	Lesson Reference
1	C		2
2	D		5
3	A		1
4	A		5
5	D		1
6	B		1
7	B		4
8	A		6
9	D		3
10	D		4
11	A		6
12	B		6
13	A		3
14	D		10
15	D		9
16	C		2
17	D		10
18	D		6
19	C		10
20	A		3
21	B		11

Total: ____ / 21

Student Name: _____

Date: _____

Ratios and Rates Test

Scoring Form • Form B

Item Number	Correct Answer	Student Answer	Lesson Reference
1	C		1
2	B		1
3	A		4
4	B		5
5	C		9
6	A		9
7	C		9
8	D		6
9	A		6
10	B		5
11	B		3
12	C		6
13	D		9
14	B		3
15	A		3
16	D		10
17	C		6
18	A		10
19	B		6
20	B		2
21	A		11

Total: ____ / 21