Mathematics

Teacher Companion Materials

2018

Paper-Pencil Format

High School

# Overview

This companion materials document provides guidance for educators to use the Mathematics Sample Test Booklet and Sample Answer Booklet for high school to help students become familiar with the format of the Smarter Balanced summative paper-pencil mathematics tests. We encourage educators to read and be familiar with the information in this document prior to using the Sample Test Booklet and Sample Answer Booklet with students.

We encourage you to incorporate these question and answer types into your classroom tests. Templates for the answer types included in the answer booklet are provided at the end of this document in Appendix A: Paper-Pencil Resources.

## Contents of the Student Booklets

There are two booklets provided for student use: a test booklet and an answer booklet. Questions in the test booklet were adapted from current or former Smarter Balanced Practice Test questions.

Each booklet should be printed as a double-sided, black and white, stapled document. Each student will need one copy of a test booklet and one copy of an answer booklet. This mirrors the format of the summative paper-pencil test. Students will need number 2 pencils. Additionally, scratch paper may be used by students.

The test booklet contains several sample questions. Students will see similar sample questions when they take the summative paper-pencil test. The test booklet also contains ten additional questions for students to practice.

**The sample booklets do not contain examples or guidance on every question type students might see on a summative paper-pencil test.** However, the sample booklets should help students become familiar with the most commonly-used question and answer types used on the summative paper-pencil test.

Each question in the test booklet, including the sample questions, has a corresponding answer space in the answer booklet.

## Contents of Teacher Companion Materials

This companion document provides directions educators can read to students while taking the sample test; these directions are derived from the directions given to students taking the summative paper-pencil test. Educators may use these directions, modify them in any way, or use a different set of directions. To use the directions in this document, read the bold-faced text that follow the “SAY” prompt on the following pages.

Tips for helping students understand each question presentation in the test booklet and record their answer in the answer booklet are also provided in italicized text. This italicized text is intended for educators and is not intended to be read to students.

# Sample Test Directions

**SAY:**

**Open your test booklet to page 2. We will begin by doing some sample questions. Your test booklet contains several different types of questions as shown on page 2. Each sample shows what a certain type of question looks like in the test booklet.**

**Now open you answer booklet to page 2. You will mark your answers to the sample questions in the SAMPLES box in your answer booklet. After you have marked your answer to the sample question we are working on, please wait quietly for further instruction. When marking your answers, be sure to fill in bubbles completely and make your marks heavy and dark. If you want to change an answer, completely erase the mark you made before making a new mark. Let’s practice!**

**For each sample question, read the question in the test booklet then record your answer in the answer booklet.**

**For Sample A, fill in only the bubble that goes with the answer you choose.**

*Sample A is a multiple-choice, single correct answer question. On a paper-pencil test, students read the question in the test booklet and then bubble one letter in their answer booklet. Ensure students are providing an answer in the answer booklet.*

**SAY:**

**Now go to Sample B. For some questions in the test, there will be more than one correct answer. Sample B is an example of this type of test question. For Sample B, fill in the two bubbles that go with the answers you choose.**

*Sample B is a multiple-choice, multiple correct answer question. On a paper-pencil test, students read the question in the test booklet and then bubble one or more letters in their answer booklet. Ensure students are providing an answer in the answer booklet.*

*As needed, draw students’ attention to the direction below the answer bubbles in the answer booklet.*

**SAY:**

**Now go to Sample C. For some questions in the test, there will be more than one part. Sample C is an example of a question which contains three parts. For Sample C, you will need to complete parts a, b, and c. Fill in the bubbles that go with the answers you choose.**

*Sample C is a matching table question. On a paper-pencil test, students read the question in the test booklet and then bubble letters in their answer booklet. Ensure students are providing an answer in the answer booklet.*

*As needed:*

* *Draw students’ attention to the lowercase, italicized letters in front of each statement in the test booklet. These same italicized letters appear in the answer booklet for this question.*
* *Draw students’ attention to the uppercase letters after each statement. These letters appear inside the bubbles in the answer booklet.*
* *Let students know a complete answer in the answer booklet has one bubble filled in for each lowercase, italicized letter.*

**SAY:**

**Now go to Sample D. For some questions in the test, you will need to write your own answer. Other questions on the test may contain a box or blank lines for you to write your answer. For Sample D, draw a point on the number line to show your answer.**

*Sample D is a short answer question. On a paper-pencil test, students read the question in the test booklet and record their answer in the space provided in the answer booklet. Short answer questions ask students to plot points on a number line, write an answer in an answer box, draw a figure, create a graph, provide a written answer, or answer a question in another way. Sample D asks students to plot a point on the number line. Ensure students are providing an answer in the answer booklet.*

*As needed, draw students’ attention to the number line in both the test booklet and the answer booklet.*

**SAY:**

**Now go to Sample E. For some questions in the test, you will need to write your own answer. For Sample E, write a number in the box to show your answer.**

*Sample E is also a short answer question. On a paper-pencil test, students read the question in the test booklet and record their answer in the space provided in the answer booklet. Short answer questions ask students to plot points on a number line, write an answer in an answer box, draw a figure, create a graph, provide a written answer, or answer a question in another way. Sample E asks students to write an answer in a small answer box. Ensure students are providing an answer in the answer booklet.*

*Draw students’ attention to the different presentation of the question in the test booklet and the answer booklet. Specifically, there is no answer box in the test booklet, only in the answer booklet.*

*For this question, students can write any number equivalent to 1 such as 1.2 and .*

**SAY:**

**Now turn to page 3 in your test booklet. At the top of page 3 you’ll see a completed answer key for the sample questions A through E. Check to be sure you correctly bubbled in your answers to the sample questions in your answer booklet. Are there any questions?**

*Have students check that they have correctly recorded their answers to the sample questions in the answer booklet.*

**SAY:**

**This sample test includes different types of questions. Read each question carefully and follow the directions. You may do your work in your test booklet. You may also mark, underline, or circle key words, and strikethrough answers in this test booklet. You must mark your answers to questions in your answer booklet.**

**Now turn to page 5 in your test booklet. You may now begin.**

*Support students as they work through the 10 questions in the sample test booklet and record their answers in the sample answer booklet. Answer questions individually, in small group, or whole class as needed to ensure students are comfortable with using both the sample test booklet and the sample answer booklet.*

# Test Booklet Questions

**Question 1**

This question is a multiple-choice, single correct answer question. On a paper-pencil test, students bubble one letter in their answer booklet.

When working with students, help them navigate between the question booklet and the answer booklet to ensure they fill in a bubble for question 1 in the answer booklet. Also ensure students are filling in only one bubble for this question in their answer booklet.

**Question 2**

This question is a multiple-select, multiple correct answer question. Students bubble one or more letters in their answer booklet for this type of question.

When working with students, make sure they notice the directions below the answer bubbles in the answer booklet. This direction, and others like it, is meant to remind students that a correct answer may have more than one bubble filled in.

**Question 3**

This question is a matching table question. On a paper-pencil test, the students fill in bubbles to indicate their answer for each statement.

When working with students, make sure they are aware of the lowercase, italicized letters in front of each statement in the test booklet. These same italicized letters appear in the answer booklet for this question. Also, notice the letters (T, F, Y, N, etc.) to the right of each statement. These same letters appear inside the bubbles in the answer booklet. A complete answer has one bubble filled in for each lowercase, italicized letter***.***

**Question 4**

This question is also a matching table question. On a paper-pencil test, the students fill in bubbles to indicate their answer for each statement.

When working with students, remind them of the directions given in question 3 above. Note that there are four statements the student needs to consider, and the letters to the right of each equation are different than question 3; instead of two bubbles for each statement there are three bubbles for each statement. However, a complete answer follows the same information as given in question 3; each lowercase, italicized letter needs to have one bubble filled in.

**Question 5**

This question is an equation/numeric question. On a paper-pencil test, students use a blank answer box to record their answer.

When working with students, ensure students are writing their answer in the correct answer box. As needed, ensure students are attending to the directions in the test booklet for rounding their answer.

**Question 6**

This question is also an equation/numeric question. On a paper-pencil test, students use a blank answer box to record their answer.

When working with students, ensure students are writing their answer in the correct answer box. Assist students as needed to ensure they write a fraction in the answer box.

**Question 7**

This question is an equation/numeric question. On a paper-pencil test, students use a blank answer box to record their answer.

When working with students, ensure students are writing their answer in the correct answer box. Assist students as needed to ensure they write an equation in the answer box.

**Question 8**

This question is a fill-in table question. On a paper-pencil test, a student writes an answer in each empty cell in the table provided in the answer booklet.

Because a table appears in the test booklet, student might only fill in the table in the test booklet. When working with students on this question, ensure they are completing the table in the answer booklet; they can complete the table in both the test booklet and the answer booklet but only the table in the answer booklet will be scored on the summative test. Additionally, help students identify which cells in the table need to be filled in for a complete answer.

**Question 9**

This question is a graphing question. On a paper-pencil test, a student draws points and segments on the grid provided in the answer booklet.

When working with students, ensure students are clearly and neatly drawing points and lines on the grid. If students want to change their answer, be sure they completely erase any segments or points they do not want as part of their answer.

**Question 10**

This question is a short-answer questions. On a paper-pencil test, students write an answer in the space provided in the answer booklet.

As with question 8, students might write their answer in the test booklet in the space below the question. When working with students on this question, ensure they are writing their answer in the answer booklet; they can write in both the test booklet and the answer booklet but only the answer in the answer booklet will be scored on the summative test.

Draw students’ attention to the directions inside the space provided in the answer booklet. Have them notice these directions are repeated from the test booklet. Also note that only part of the information in the test booklet is repeated in the answer booklet; students must read the entire question in the test booklet in order to create their answer for the answer booklet.

When working with students, ensure students are clearly and neatly writing their answer inside the space in the answer booklet. If students want to change their answer, be sure they completely erase any part of their writing they do not want as part of their answer.

# Appendix A: Paper-Pencil Resources

These objects can be incorporated into classroom tests. Copy and Paste the images as needed to allow further practice with the question answer types that appear on the paper-pencil Smarter Balanced tests.

Multiple-choice, single correct answer:

Four bubbles labeled A, B, C, and D.

Multiple-select, multiple correct answer:



True/False, Yes/No:





Small Answer Box:



Large Answer Box:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_