

CAHSEE Mathematics - Chapter 2

Notes To The Teacher

How to Use the Self-Analysis and Scoring Guide

Background: The Self-analysis is designed to give students an idea of how they might score if they were to take CAHSEE Math today. Completion of this exercise is critical to reducing test and math anxiety associated with high stakes testing. **The directions appear at the top of each page in the student workbook.**

How students complete the "Self-Analysis."

1. Students read each standard in Category A and give themselves a score of 0-3 based on their understanding of each standard. When finished, they total their score for Category A.
2. Students repeat the process for Category B except they give themselves a score of 0-2. When finished, they total their score for Category B.
3. Students repeat the process for Category C except they give themselves a score of 0-1. When finished, they total their score for Category C.
4. After completing Category C, they put their totals from Categories A-C on the chart and get a total score.
5. Using the CAHSEE Scoring Guide, students look up their total score and see what scaled score correlates with their total number. That would be the score they would get on CAHSEE math if they got that many problems correct.

Teacher Tip: If students do not know what a given standard means, allow them to flip through their book to find practice problems for that standard. This gives them an idea of how that standard might be tested. After they determine their knowledge of that math content, they give themselves a score in the blank provided.

Note: Scaled scores above 350 (approximately 43 problems correct) would be a passing score. However, students should aim for proficiency meaning their scaled score should be 380 or higher (approximately 59 or more problems correct).

Disclaimer: *the Self-Analysis is an estimation tool only and cannot guarantee the passing or not passing of CAHSEE math.*

Notes To The Teacher

How to Use “Analyzing your Past Results”

First time takers should skip this exercise and go to Study Priority 2.

This exercise is for students who have taken but not passed CAHSEE Math.

The purpose of this exercise is to ensure that students who have not previously passed know the breakdown of how they received their score. They then use this information to set new goals and to ultimately create a study plan based on these goals.

**Students must be given their CAHSEE Math score printout to complete this exercise.

Students set a new goal to get more problems correct.

Strand	Number	Number you got correct	Your goal is to get the number below correct next time
Number Sense (NS)	14		maximum 14
Statistics, Data Analysis, and Probability (PS)	12	Students record their scores from the CAHSEE	maximum 12
Algebra and Functions (AF)	17		maximum 17
Measurement and Geometry (MG)	17		maximum 17
Mathematical Reasoning (MR)	8	Math report	maximum 8
Algebra I (1A)	12		maximum 12
Total	80	_____	New Goal Total (80 is the maximum) (Total should equal 59 or more)

If a students' new goal total is less than 59, they should go back and reset their goals until their total is over 59.

Teacher Tip: Encourage students to set goals based on their strengths (not their weaknesses). For example, if a student got 9 out of 17 MG problems correct, they are likely to get additional MG problems correct after studying. Therefore, a goal to get 15 out of 17 MG problems correct is more realistic than setting a goal to get all of the problems right in a category where they got only 1 or 2 problems correct previously.

Filtering Questions: (Ask students these questions as they set their goals as well as when they have completed their goals)

- Is your goal to get more than 59 items correct? * Although students can pass with approximately 43 items correct, they need to plan to exceed the minimum and give themselves a cushion.
- Did you set goals to improve your highest scoring area/s (goal setting based on your strengths)?
- Did you look at the chapter for that strand to see what kinds of questions will be asked?

Notes To The Teacher

How to Use Creating Your Study Plan – Study Priority 1

First time takers should skip to "Study Priority 2."

CREATING YOUR STUDY PLAN – Below is an example of a completed chart.

STRAND	Column D score (from the table above) (values would have come from the previous exercise)	I overestimated what I might get correct on the test (Check here if the number is negative)	I underestimated what I might get correct on the test (Check here if the number is positive)	I estimated correctly what I might get correct on the test (check here if the number is 0)
Number Sense (NS)	-2	✓		
Statistics, Data Analysis, and Probability (PS)	-3	✓		
Algebra and Functions (AF)	5		✓	
Measurement and Geometry (MG)	0			✓
Mathematical Reasoning (MR)	0			✓
Algebra I (1A)	3		✓	

Study Priority 1: Start by studying the math content where you overestimated what you might get correct: Students write the strands into the chart below that were checked off in the 'overestimated' column above. They then refer to the Blueprints and write the standards that go with that strand. The standards should be separated based on how many test items they have as indicated below.

Write the standard's number (e.g. 1.1, 2.3) that corresponds with the strand

Write the name of each strand where you overestimated what you might get correct	Standards with 3 items	Standards with 2 items	Standards with 1 item
Number Sense (NS)	1.2,	1.3, 1.7	1.1, 1.6, 2.1, 2.2, 2.3, 2.4, 2.5
Statistics, Data Analysis, and Probability (PS)	6-1.1	6 - 3.3, 7-1.1, 7-1.2, 7-2.2	6-2.5, 6-3.1, 6-3.5
(This is a sample of how a chart would be completed based on the sample in the previous example. Each student's chart will be different)			

The information from this chart will be used in Study Priority 2.

Notes To The Teacher

How to Use The “CAHSEE Test Taking Tips” Section

The test taking tips can be used as follows:

- To help students review content that was missed
- To use a technique while solving the practice problems
- To review with students to offer them strategies on how to attack problems.

Suggested Activity:

1. Students select 1-3 test taking strategies.
2. They then choose 3 practice problems that they missed. (Be sure the problem they choose goes with a standard from Study Priority 2)
3. Students resolve the problem using one of the Test Taking Tips. They solve the problem again using another strategy. They can resolve missed problems up to 3 different ways. Check with each student to ensure that the problem they select works with the Test Taking Tip they select. If it is a forced fit to use the selected Test Taking Tip, then they can choose a different problem and/or a different strategy.

For Example:

Step 1: Students start with a problem they missed using Test Taking Tip 3.

With Test Taking Tip 3, students will substitute simple numbers into the problem where they know the answer. Then, students follow the same procedure with the more difficult numbers that appear in the problem they missed.

Step 2: Students can resolve the same problem using Test Taking Tip 8.

Students resolve the problem from steps 1 and 2 by rounding off the numbers in the problem to the nearest power of ten. This should allow students to do the problem in their head or with simple paper and pencil recording. They then have a ball park answer. They should also round off the answer choices and eliminate any choices that are way outside of a reasonable range of their estimate. This strategy often narrows the answer choices and can sometimes allow you to find the correct answer without fully solving the problem.

Step 3: Students can resolve the same problem using Test Taking Tip 5.

Students resolve the problem from step 1 by plugging in each answer choice into the problem. By plugging in the answer choices, it is easy to see which answer choices do not fit the conditions of the problem.

***Note: this strategy works best with equations.*