

CAHSEE Mathematics - Chapter 2

Self-Analysis - Determine Your Strengths As They Compare to CAHSEE Math

Category A - For the content area below, please rate your knowledge:

- 0 - I don't understand it at all
- 1 - I know a little about it
- 2 - I know it but need to brush up
- 3 - I know it well and will get questions correct on that topic

| Category A | Your Score 0, 1, 2, or 3 |
|--|-----------------------------|
| Compute the mean, median, and mode of data sets (6PS 1.1) | |
| Add, subtract, multiply, and divide integers, fractions, and terminating decimals. Take positive rational numbers to whole-number powers. (7NS 1.2) | |
| Solve two-step linear equations and inequalities in one variable over the rational numbers, interpret the solution or solutions in the context from which they arose, and verify the reasonableness of the results. (7 AF 4.1) | |
| Represent quantitative relationships graphically and interpret the meaning of a specific part of a graph in the situation represented by the graph. (7 AF 1.5) | |
| Use formulas routinely for finding the perimeter and area of basic two-dimensional figures and the surface area and volume of basic three-dimensional figures, including rectangles, parallelograms, trapezoids, squares, triangles, circles, prisms, and cylinders. (7 MG 2.1) | |
| TOTAL for Category A..... (maximum score 15 points)... | |

Category B - For the content area below, please rate your knowledge:

- 0 - I don't understand it at all
- 1 - I know a little about it and might get the problems correct
- 2 - I know it well and will get most questions correct on that topic

| Category B | Your Score 0, 1, or 2 |
|--|--------------------------|
| Represent probabilities as ratios, proportions, decimals between 0 and 1, and percentages between 0 and 100 and verify that the probabilities computed are reasonable; know that if p is the probability of an event, $1 - p$ is the probability of an event not occurring. (6PS 3.3) | |
| Know various forms of display for data sets. Use the forms to display a single set of data or to compare two sets of data. (7PS 1.1) | |
| Represent two numerical variables on a scatterplot and informally describe how the data points are distributed and any apparent relationship that exists between the two variables (e.g., between time spent on homework and grade level). (7PS 1.2) | |
| Convert fractions to decimals and percents and use these representations in estimations, computations, and applications. (7NS 1.3) | |
| Solve problems that involve discounts, markups, commissions, and profit and compute simple and compound interest. (7NS 1.7) | |

Self-Analysis (Con't)

| Bring down your Scores | Your Score |
|---|------------|
| Total for Category A (maximum 15) – (Math content with 3 questions on CAHSEE Math) | |
| Total for Category B (maximum 34) – (Math content with 2 questions on CAHSEE Math) | |
| Total for Category C (maximum 31) – (Math content with 1 question on CAHSEE Math) | |
| TOTAL SCORE (maximum 80) Add category A, B, C | |

| Analyze Your Score | |
|--|--|
| Look on the next page titled <i>"How The CAHSEE Math Test Is Scored"</i> | |
| 1. In the "Number Correct" column , find your TOTAL SCORE. 2. Write the SCALED SCORE that correlates with the "Number Correct" in the Number Correct column in the box below. | |
| This is the SCALED SCORE you would get if you got the number correct as indicated by your TOTAL SCORE. | |
| You must get a SCALED SCORE higher than 350, so aim for 380. Your estimated SCALED SCORE is <u>how many points from 380?</u> | |

Based on your self-analysis, if your scaled score is above 350, you are in a good position to pass. However, we recommend that you aim for 380 to achieve proficiency. We recommend that you practice for the test even if your estimated scaled score is over 380. Therefore, the next step is to develop a study plan.

Self-Analysis (Con't)

How the CAHSEE Math Test is Scored

CAHSEE Mathematics Score Conversion Table, May 2006

The Raw Score (number correct) Compared to the Scaled Score (your score)

You need at least 350 to pass and 380 to be proficient

| Number Correct | Your Score | Number Correct | Your Score | Number Correct | Your Score |
|----------------|-----------------|----------------|------------|----------------|------------|
| 80 | 450 | 53 | 368 | 26 | 319 |
| 79 | 450 | 52 | 366 | 25 | 317 |
| 78 | 450 | 51 | 364 | 24 | 315 |
| 77 | 450 | 50 | 362 | 23 | 313 |
| 76 | 445 | 49 | 361 | 22 | 310 |
| 75 | 437 | 48 | 359 | 21 | 308 |
| 74 | 431 | 47 | 357 | 20 | 306 |
| 73 | 425(Advanced) | 46 | 355 | 19 | 304 |
| 72 | 420 | 45 | 353 | 18 | 301 |
| 71 | 416 | 44 | 352 | 17 | 299 |
| 70 | 412 | 43 | 350(Pass) | 16 | 296 |
| 69 | 408 | 42 | 348 | 15 | 293 |
| 68 | 405 | 41 | 346 | 14 | 290 |
| 67 | 401 | 40 | 344 | 13 | 287 |
| 66 | 398 | 39 | 343 | 12 | 284 |
| 65 | 395 | 38 | 341 | 11 | 281 |
| 64 | 393 | 37 | 339 | 10 | 277 |
| 63 | 390 | 36 | 337 | 9 | 275 |
| 62 | 388 | 35 | 336 | 8 | 275 |
| 61 | 385 | 34 | 334 | 7 | 275 |
| 60 | 383 | 33 | 332 | 6 | 275 |
| 59 | 381(Proficient) | 32 | 330 | 5 | 275 |
| 58 | 378 | 31 | 328 | 4 | 275 |
| 57 | 376 | 30 | 326 | 3 | 275 |
| 56 | 374 | 29 | 325 | 2 | 275 |
| 55 | 372 | 28 | 323 | 1 | 275 |
| 54 | 370 | 27 | 321 | 0 | 275 |

STRAND

NUMBER OF QUESTIONS ON CAHSEE MATH

| | |
|---|-----------|
| Number Sense (NS) | 14 |
| Statistics, Data Analysis, and Probability (PS) | 12 |
| Algebra and Functions (AF) | 17 |
| Measurement and Geometry (MG) | 17 |
| Mathematical Reasoning (MR) | 8 |
| Algebra I (1A) | 12 |
| TOTAL | 80 |

CAHSEE Mathematics - Chapter 2

Analyzing Your Past Results:

If this is your first time taking CAHSEE Math, please skip to the Creating A Study Plan - Priority 2.

You will need your test results from the last time you took CAHSEE math where you received a scaled score less than 350.

| Strand | Number | Number you got correct | Your goal is to get the number below correct next time |
|---|--------|------------------------|--|
| Number Sense (NS) | 14 | | |
| Statistics, Data Analysis, and Probability (PS) | 12 | | |
| Algebra and Functions (AF) | 17 | | |
| Measurement and Geometry (MG) | 17 | | |
| Mathematical Reasoning (MR) | 8 | | |
| Algebra I (1A) | 12 | | |

Total

80

(Total should equal 59 or more)

Please look back at your Self-Analysis and follow the instructions below to focus your studying:

Column A - In the table below, write in the number you got correct from the table above for each strand

Column B - On the self-analysis page, look at the parenthesis at the end of each statement. The parenthesis contain an abbreviation for the standard it represents. For example, PS is the abbreviation for Statistics, Data Analysis, and Probability and NS is the abbreviation for Number Sense.

| Category A | Your Score 0, 1, 2, or 3 |
|--|-----------------------------|
| Compute the mean, median, and mode of data sets (6PS 1.1) | 2 |
| Add, subtract, multiply, and divide integers, fractions, and terminating decimals. Take positive rational numbers to whole-number powers. (7NS 1.2) | 1 |

Column C - In the third column, write in the number of tally marks that correspond with the score you estimated on the self analysis. For example, if you gave yourself a score of 2 for (6PS 1.1), you would make 2 tally marks in the Statistics, Data Analysis, and Probability (PS) column below you gave yourself a 1 for (7NS 1.2) you would make one tally mark in the Number Sense column like the tally marks in the example below.

Creating a Study Plan

Study Priority 2: Target and study the standards you expect to get correct and write them below. Cross off the standards that you have studied once you feel comfortable with them.

As you complete the study plan, remember your new goal for each strand from the previous page if you have taken CAHSEE Math before.

| Standard (strand w/number) | # on test | How many are you planing to get correct? | Math Content (in your own words) | The practice problems are on page/s |
|-------------------------------|-----------|--|----------------------------------|---|
| 1 | | | | |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | |
| 5 | | | | |
| 6 | | | | |
| 7 | | | | |
| 8 | | | | |
| 9 | | | | |
| 10 | | | | |
| 11 | | | | |
| 12 | | | | |
| 13 | | | | |
| 14 | | | | |
| 15 | | | | |
| 16 | | | | |
| 17 | | | | |
| 18 | | | | |
| 19 | | | | |
| 20 | | | | |
| 21 | | | | |
| 22 | | | | |

Totals = _____
(*must be 59 or higher)

CAHSEE Test Taking Tips (Con't)

15. Make sure that you compute using the same unit throughout the problem and convert unlike units to like units when needed.
16. Trust yourself. This book will expose you to the different types of questions on the CAHSEE. Relax and LOOK SEE DO.

You have the tools to pass the CAHSEE. As you complete the practice problems, go through the steps above to review your answers BEFORE you look at the answer key. Follow the plan outlined above then on test day remind yourself that you will LOOK (read the question and mark diagrams), SEE (recognize the steps to take) and DO (carry out what you practiced).

ON THE DAY OF THE TEST....

- Get 8 hours of sleep the night before.
- Drink lots of water and keep a full bottle of water close by. Water dilutes the hormones caused by stress. Therefore, drinking water reduces the impact of test anxiety.
- Bring protein snacks like peeled boiled eggs, nuts, cheese, and lunch meat. No sugar, fruit (including fruit juice), soda, or candy. Sweets will add to your fatigue making it harder for you to focus.
- Listen to classical music from artists like Johann Sebastian Bach, Pyotr Tchaikovsky, Johannes Brahms, and Igor Stravinsky. This kind of music stimulates and readies your brain for intellectual thought.
- Think positive thoughts and envision yourself doing well.
- Pace yourself. *For example, if you do 30 problems an hour, you have 2 minutes per problem. At this pace, 92 problems (the 80 problems plus the 12 field tested problems) will take a little over 3 hours. You may want to put yourself on a slower pace that will take 4 or 5 hours. As you do the practice tests in this book, time yourself so you know how much time you might need. Ask for the additional time if you need it.*