

MATH STRATEGIES

The math section tests both your general knowledge of math concepts and your ability to apply this knowledge quickly to solve multi-step problems. There are 44 multiple choice questions and 10 student-produced response questions, which require you to grid in your response on a specific section of the answer sheet. You are allowed to use a scientific or graphing calculator, provided it does not have a touch-screen, stylus, or internet access; you are *not* allowed to use your cell phone as a calculator. Each section will include a list of basic geometric formulas for your reference.

General Strategies

- Know the directions and given formulas prior to writing the exam. Review how and when to use these formulas.
 - Make sure you are familiar with the calculator you bring to the test. Bring fresh batteries in case yours run out.
 - Don't overly rely on your calculator, as it may actually slow you down.
 - Pace yourself. If you are stuck on one question, circle it and move on. The questions are always arranged from easy to hard.
 - Write in your test booklet. Draw figures and write out all calculations so you can go back to difficult problems or check your work.
 - Use the given diagrams. Write in measurements and add diameters and diagonals. Trust that figures are drawn to scale unless otherwise noted.
 - If a figure is not drawn to scale, draw your own to avoid making false assumptions.
 - Substitute real numbers for variables to test algebraic equations or ratios, fractions, and percents.
 - Don't panic when you see strange symbols, but read their definitions very closely.
 - If you are stuck on a multiple choice question, work backwards to test each answer option.
 - If you are really stuck on a multiple choice question, cross out the obviously wrong answers, then guess among the remaining choices.
 - Double-check that your answer makes sense, that it answers the question asked, and that you have not made careless mistakes.
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Student-Produced Responses

- There is **no penalty for guessing** on the student-produced response questions.
- The machine will only grade the answers you entered into the grid. Your handwritten answer at the top of the grid will not be scored; it is only meant to help you fill in the grid properly.

- It does not matter where in the grid you write your answer (to the right, left, or centre) as long as you do not run out of room.
- There is no negative symbol provided in the grid, so every answer to the student-produced response questions will always be a positive number or 0.
- **Do not round or reduce fractions** unless your answer will not fit into the grid. Rounding may give you a less accurate result than the machine is looking for, and reducing fractions unnecessarily wastes time. If your answer is a fraction that won't fit into the grid, convert it to a decimal with your calculator.
- Never try to grid in a mixed number. There is no way to leave a space between the whole number and the fraction, so the machine will read it as a fraction.
- **Do not write a 0 before the decimal point.** Always grid in .333, .45, .7, not 0.333, 0.45, 0.7.
- These questions may have multiple correct answers. Choose only one to grid in.