INTELLIGENT TUTOR™ SPECIAL TOPICS SERIES

SAT/ACT MATH

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Windows Network Version

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Program Summary

Objective

SAT/ACT MATH provides drill and practice exercises designed to help high school students prepare for the math portions of the SAT I and ACT exams. The program helps students build problem solving skills, and reinforces their understanding of basic concepts and principles. A test mode is also available to help students evaluate their skills, and identify their strengths and weaknesses.

Level

Grades: 11-12
Prerequisites: Elementary Algebra, Geometry

Minimum Computer Requirements

* Windows XP, Windows Vista, or Windows 7
* 10MB of free hard disk space

Welcome to SAT/ACT MATH

Welcome to SAT/ACT MATH in the INTELLIGENT TUTOR™ Special Topics Series!

SAT/ACT MATH is designed to help you improve your performance on the math sections of the SAT and ACT exams. Designed by educators, it provides a comprehensive range of drill and practice exercises that will provide helpful practice for students, even after being used many times.

SAT/ACT MATH can be used in two ways: Practice Mode and Test Mode.

Practice Mode allows you to select a problem type and to practice solving problems of that type. After each problem, you are told if your answer was correct or incorrect. You are then given these options: to re-do the problem; to see an explanation of the problem; to try another problem of the same type; to return to the Practice Menu to select another problem type; or, to return to the Main Menu.

Test Mode allows you to take sample tests. Following the test you will see your performance on each problem, as well as an overall evaluation of your skill level.

Problem Types Covered

The 35 problem types contained in SAT/ACT MATH, shown below, will help students prepare for the kinds of problems most frequently presented on the SAT and ACT exams.

1. Area between two figures
2. Decimals, fractions, percent
3. Probability
4. Solving an algebraic equation
5. Arithmetic comparisons
6. The number line
7. Arcs and angles
8. Equation of a straight line
9. Determining a function
10. Averages: A carpenter's salary
11. Sequences
12. Scientific notation
13. D = RT
14. Word problems: Addition/Subtraction
15. Functions: Comparisons
16. Pythagorean theorem
17. Averages of test scores
18. Exponent rules
19. Lines in the plane
20. Mixtures: Salt water
21. Coordinates of a rectangle
22. Word problems: Factory Workers
23. Word problems: Area, perimeter
24. Angle comparisons
25. Simplifying radicals
26. Data interpretation
27. Word problems: Fractions
28. Word problems: People at a party
29. Factoring
30. Word problems: Percent
31. Word problems: A library
32. Word problems: A school
33. Evaluating expressions
34. Exponents
35. Word problems: Absolute value

Installing the Program

This program is a network version. It is meant to be installed with the INTELLIGENT TUTOR™ recordkeeping and management software included on the INTELLIGENT TUTOR™ CD-ROM.

Please refer to the installation instructions entitled "INTELLIGENT TUTOR™ Recordkeeping System" that were contained in the manila envelope you received with this package.

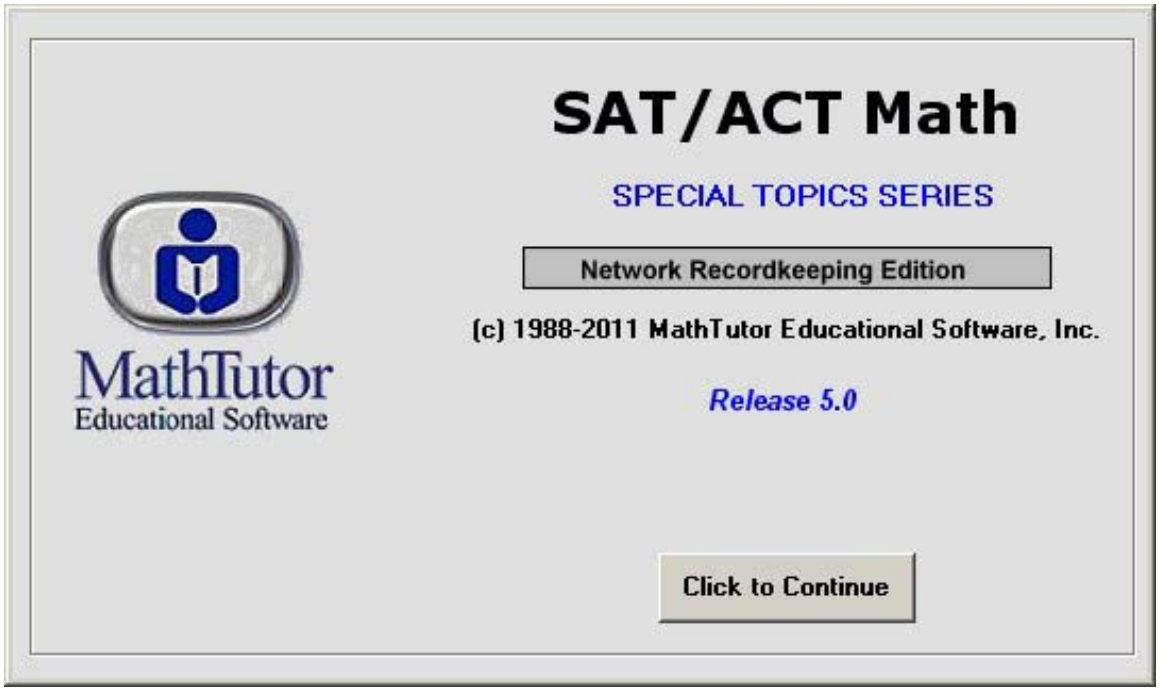
Starting the Program

Step 1 Click the **Start** button on the Windows taskbar. The Start menu opens.

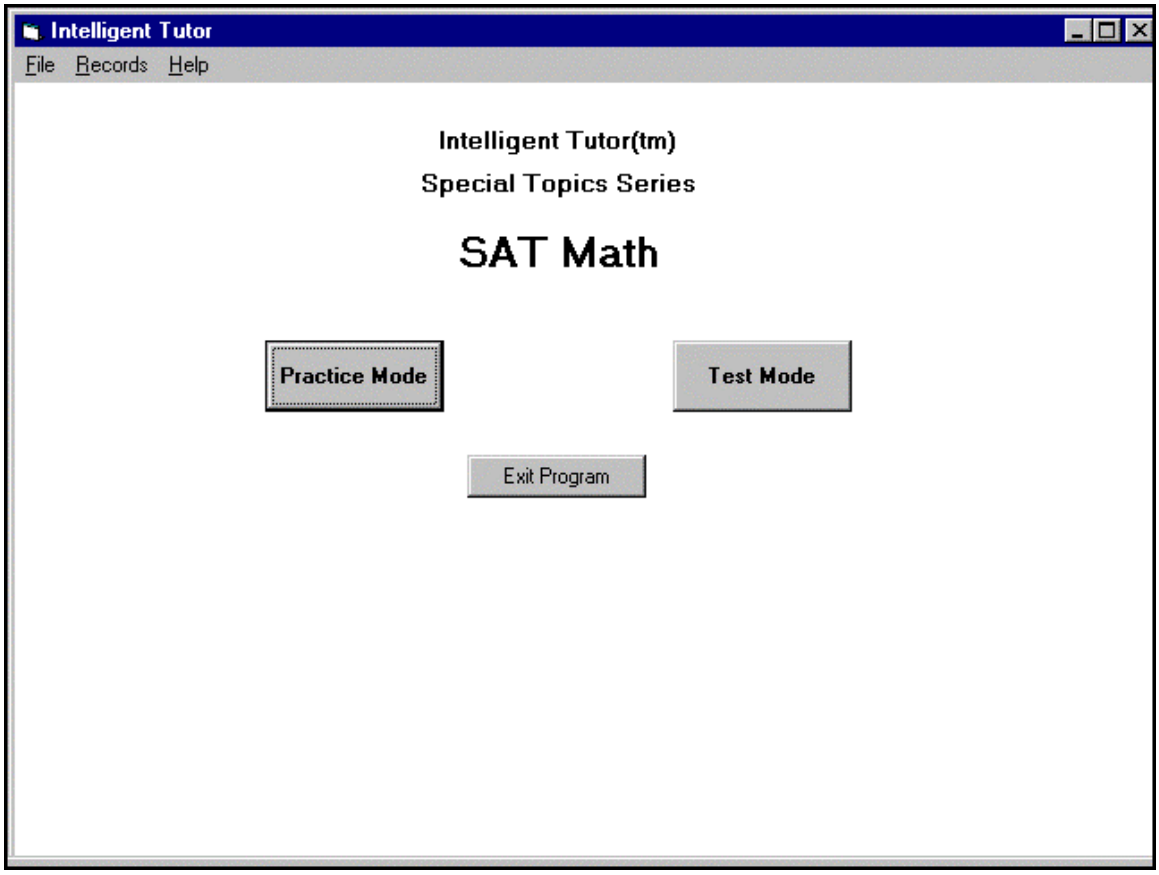
Step 2 Choose **Programs**. The Programs folder opens.

Step 3 Choose **Intelligent Tutor**.

Step 4 Click **SAT-ACT MATH**. The program will then begin, and the title screen (shown below) will appear. Click the button titled "Click to Continue".



Using the Program



The main program menu (shown above) is your take-off point for using the two main parts of the program - Practice Mode and Test Mode.

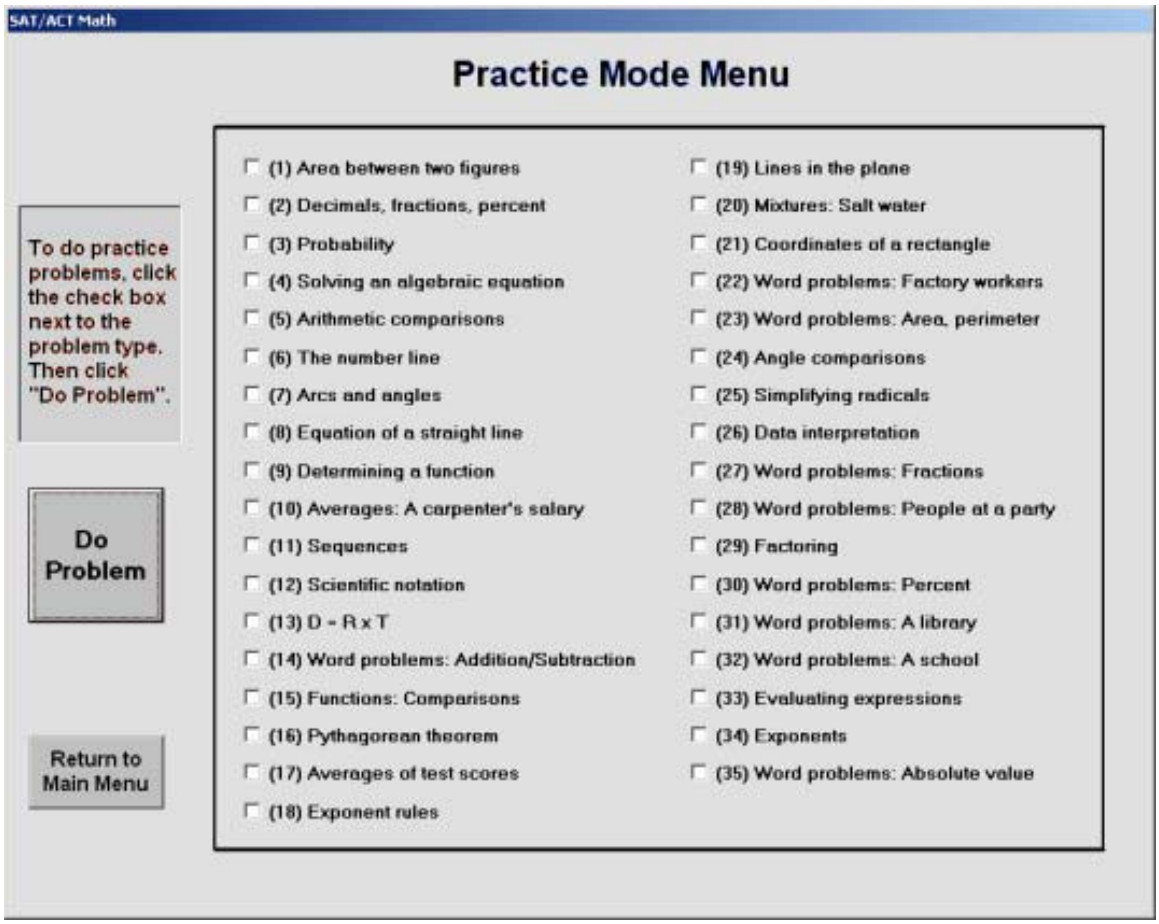
Click **Practice Mode** to see the Practice Mode Menu, which is described on the following page.

Click **Test Mode** to see the Test Menu, which is described on page 10.

Click **Exit Program** to end the program.

As you use the program, you may wish to see a summary of how well you are doing in the current session. The RECORDS menu allows you to see a summary of your performance in the current session. It is explained later in this manual.

Practice Mode



If you selected “Practice Mode” on the main menu you will see the Practice Mode Menu shown above.

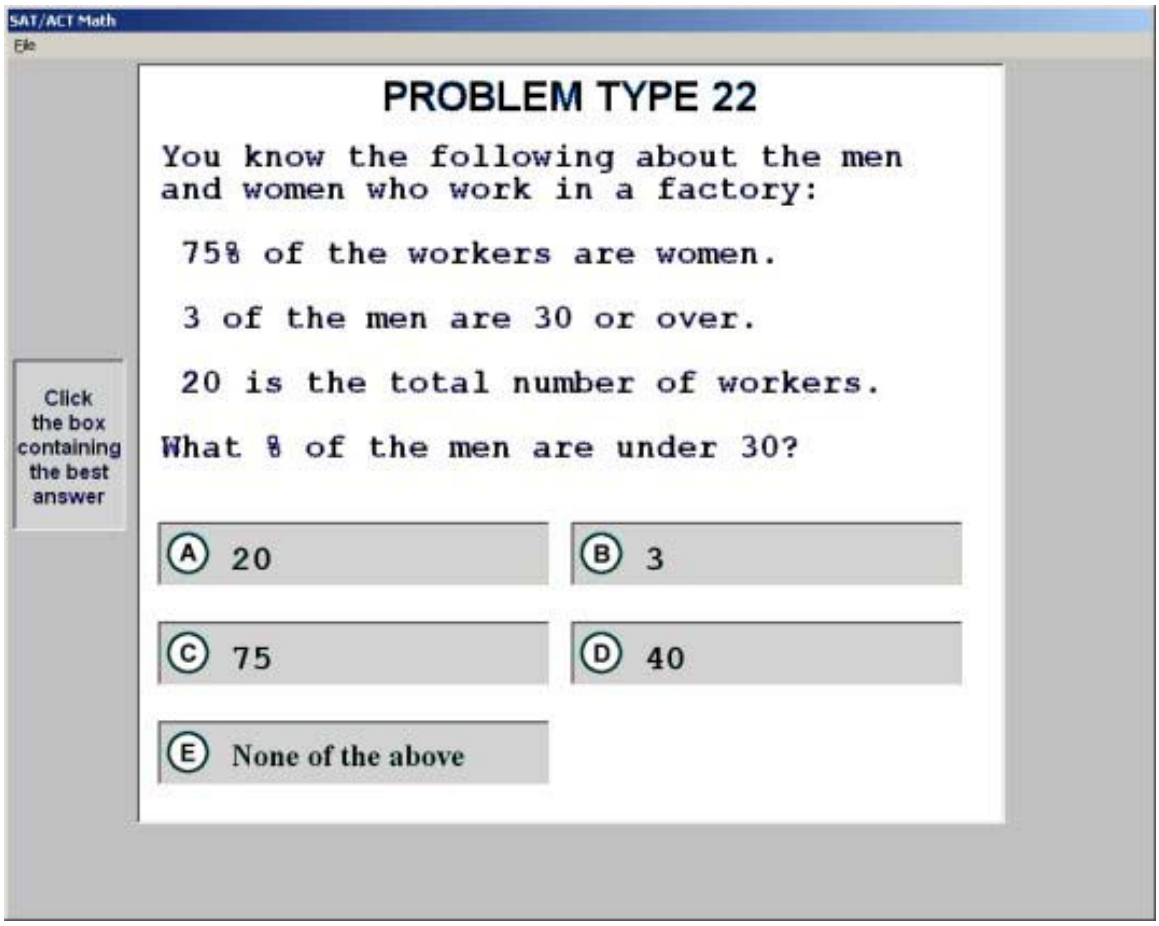
This menu allows you to select a problem type to practice. Each of the 35 problem types contains thousands of random variations, assuring that the program will continue to provide new and challenging problems even after being used many times.

The Practice Mode menu groups the problems into four problem set areas, making it easier for you to find particular kinds of problems that you may wish to practice.

To begin practice in problem solving, click the check box to the left of the problem type description. Then click the “Do Problem” button.

After trying a problem you'll be told immediately if your answer was correct or incorrect. If you like, you’ll be able to re-do the problem. You’ll also be able to see an explanation of the solution to the problem.

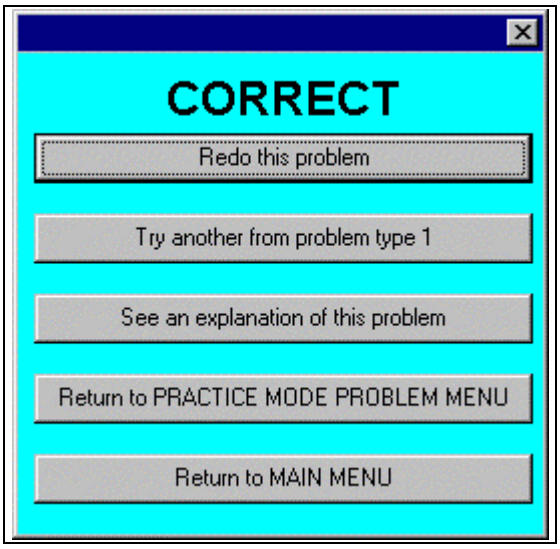
Practice Mode (continued)



When the program presents a problem for you to solve, such as you see in the screen above, the answer choices will be displayed in a multiple choice format. To select an answer, click the box that contains the answer, or click one of the answer choice buttons at the bottom of the screen.

The program will respond by telling you if your answer was correct or incorrect. The options available to you at this point are shown on the following page.

Practice Mode (continued)



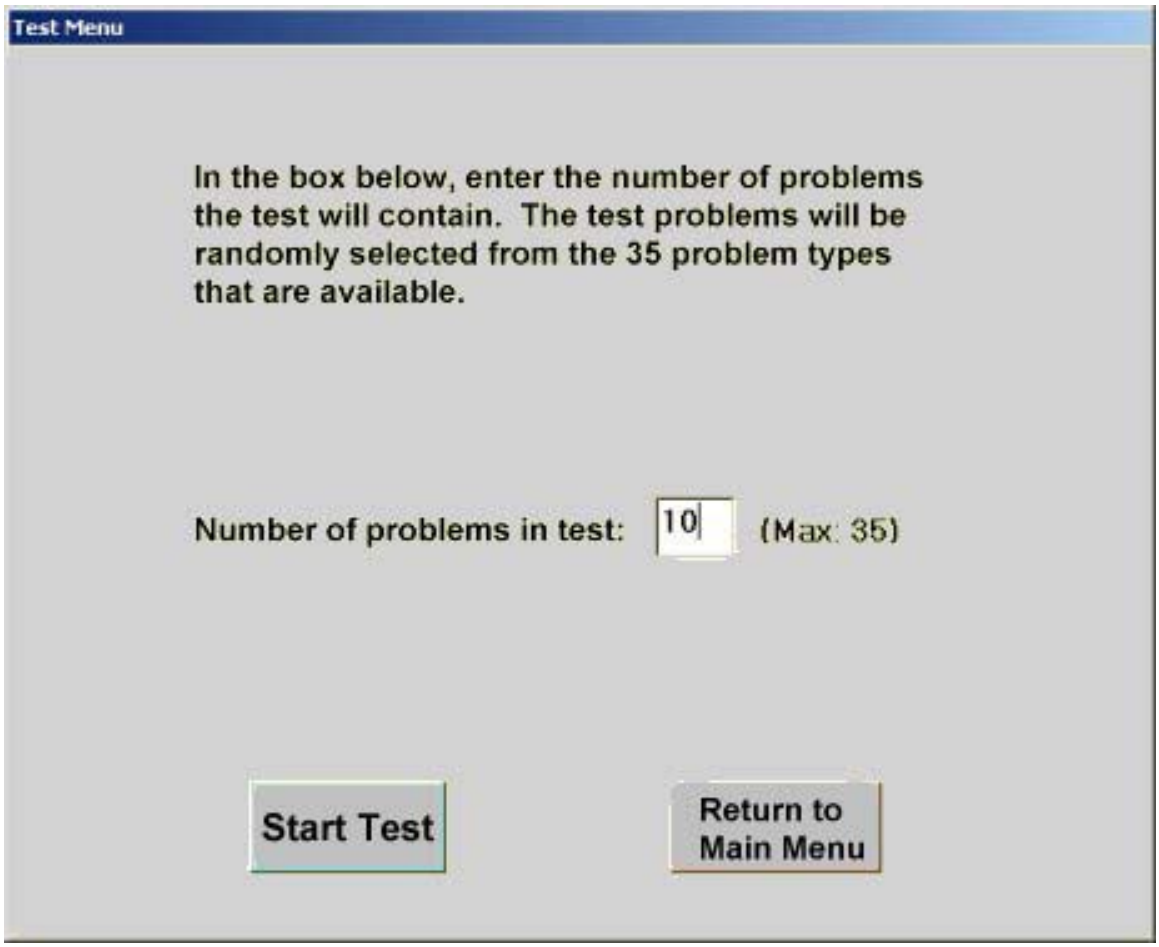
After doing a problem, select one of the options shown to the left.

Most of the choices are self-explanatory.

If you did not solve the problem correctly, and would like to see how it can be solved, select the third option choice: "**See an explanation of this problem**".

Trying to solve problems is one of the best ways for you to build your math skills, so we encourage you to spend time practicing problems.

Test Mode



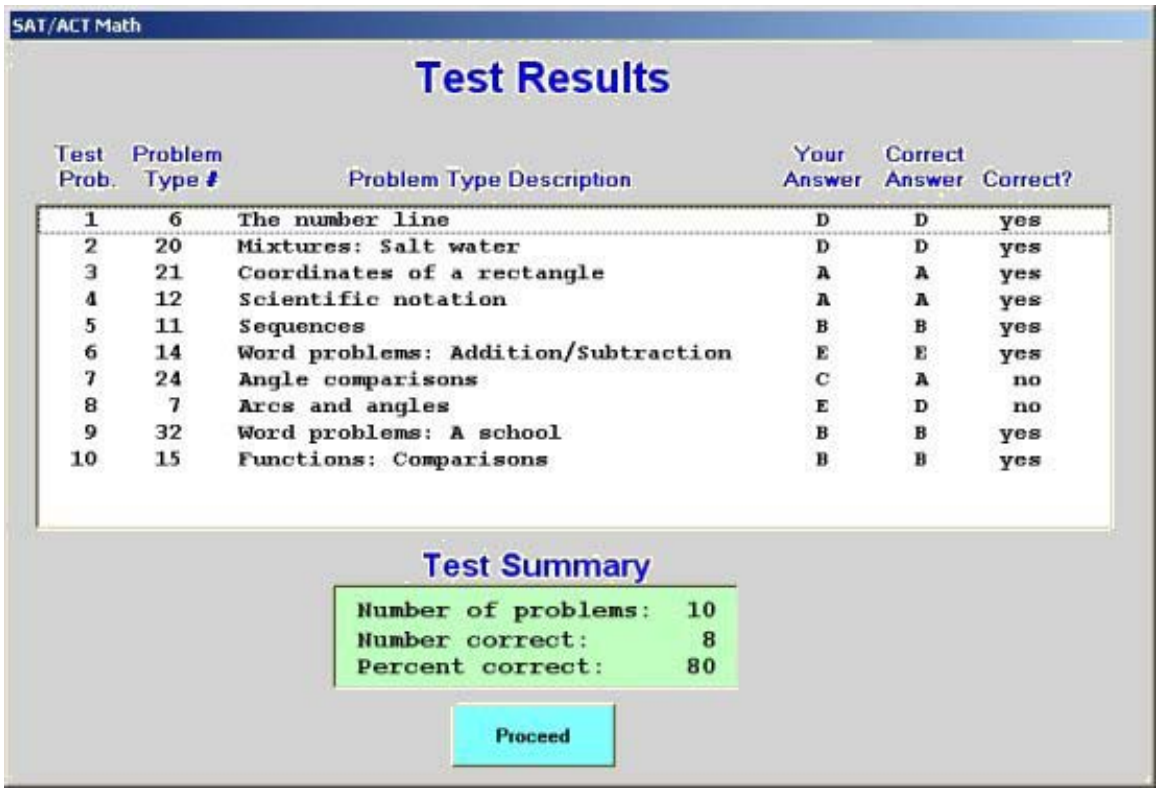
If you selected "Test Mode" on the main menu you will see the Test Menu shown above. Test mode allows you to take sample tests, and to see both a detailed evaluation of your performance and an overall evaluation of your skills.

To take a test, first specify the number of problems you wish to do (a number between 1 and 35). Then click "Start Test".

Test Mode (continued)

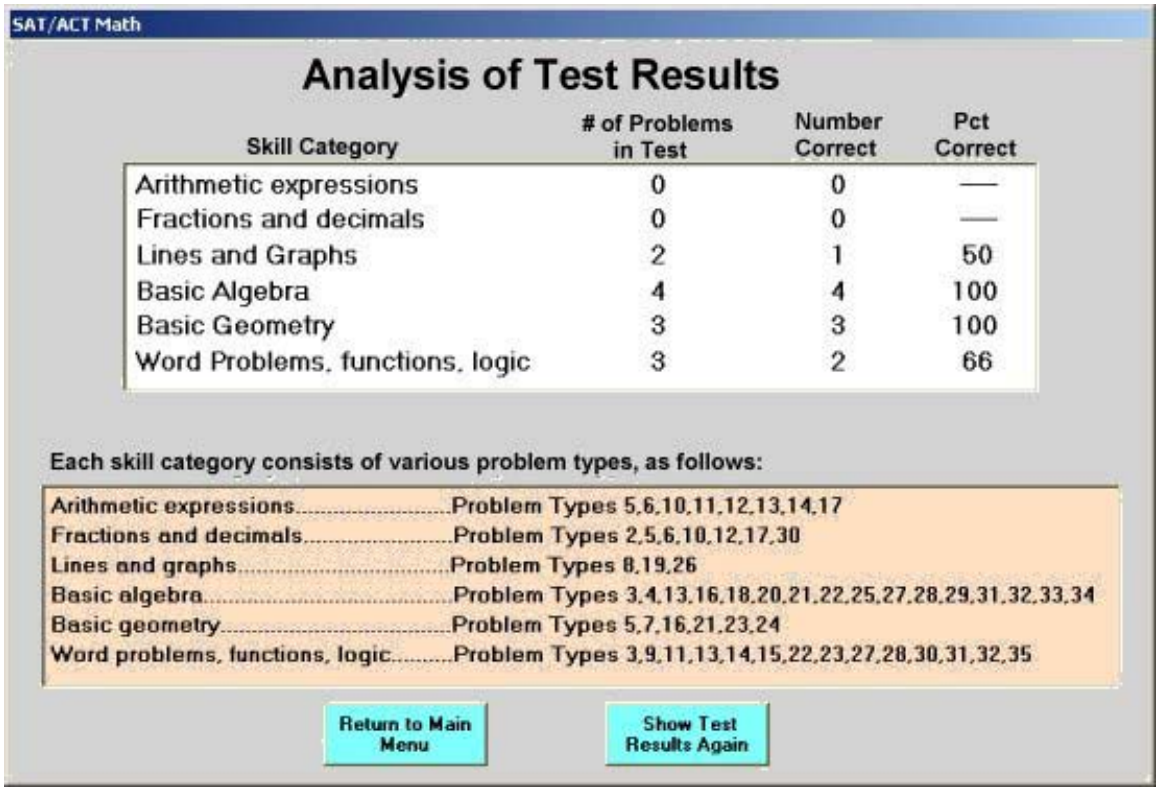
After completing the test, the program will show you the results in two separate screens.

First, you will see your performance on each of the test problems, as shown below. For each test problem you are shown the problem type number, the problem type description, your answer, the correct answer, and whether your answer was right or wrong. Your overall percentage correct is shown in a summary box at the bottom at the screen.

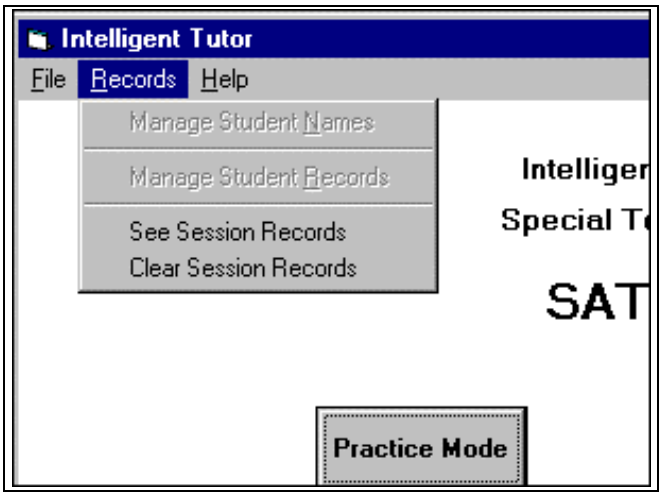


Test Mode (continued)

Next, you will see an evaluation of your performance by skill category, as shown below. Each skill category represents a group of problem types that require a certain skill. The skill categories are explained in the table at the bottom of the screen. For example, the skill category "Basic geometry" consists of problem types 5, 7, 16, 21, 23, and 24.



Looking at Your Performance in the Current Session



The **RECORDS** menu allows you to see your performance during the current session.

Select "See Session Records" to see your performance.

Select "Clear Session Records" to erase this sessions records.

The screen below shows how the current session's records are displayed.

