

Age Range

11, 12, 13, 14, 15, 16

Special needs

No specific targeting here, though could usefully be used to practice once basic rules have been learnt.

Intended use

individual, group, class

Curriculum Content

The software is extremely thorough in covering algebraic topics: linear functions, quadratic functions, function transformations, substitution, mensuration, simultaneous linear equations, removing brackets.

Within each topic there is the option to set the level of difficulty. Different time allocations for timed exercises can be set eg level 1 - 20 seconds, level 2 - 10 seconds and level 3 - 5 seconds, depending on the difficulty of the topic. KS3 or KS4 questions can be selected for topics that appear in both Key stages.

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Design and Useability

When you launch the program you are presented with the above list, as you pass your mouse over the subject headings submenus appear detailing the different topics available eg: quadratic functions is divided into: factorisation, solving quadratics, completing the square, inequalities.

There is a comprehensive selection of questions on the chosen topic. All of the questions can be answered on the computer itself (no pen or paper is needed). The answers are easy to enter into the computer; you can use the numeric pad or normal keyboard, the tab, delete and highlight functions all work normally.

The questions are varied and it takes along time to exhaust the computer, there is an option for timed tests where the time allocated to each question can be altered (see levels of difficulty above) or practice questions. The tests are very useful for practice and revision, especially in the classroom. My pupils found the timed questions really helped them to speed up (useful under exam conditions)

The program gives the option for assistance at any time, this accesses a set of notes The Method with clear diagrams explaining the topic and setting out various calculations or onscreen assistance giving clear guidance on how to tackle the questions. In addition to this useful feature there is an integral calculator, which sits neatly inside the screen.

In addition to the onscreen help (optional) and the notes for each section on how to answer the questions there is a useful Glossary section allowing you to scroll through a list of terms specifically used in algebraic topics.

Conclusion

The question range was enormous going from basic algebra for Year 7 KS3 up to Year 11 KS4. You need to be selective in order to get the most out of this program. The program is extremely comprehensive and can with selection be used for Years 9-11 and so is a very good piece of software for any Mathematics department. For home users a useful revision package and if purchased in year 7 of a child's education would offset the initial cost if such intensive work is needed in this area of the syllabus.

This program stands up well to whole class use; it can be used for reinforcement and would also be a useful tool for revision clubs. My pupils have responded well to it commenting on the immediate feedback from the computer and the ease with which the answers can be entered. Many are thankful that there are no forcibly cheery voices introducing each topic.