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# Introduction

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# Helpful Entertainment

Welcome to the **Chess Puzzles Series** - an entertaining world of games created on the basis of the game of chess. To play these games you do not have to be a chess professional of any rank whatever; all you must know is how the chess pieces make moves. However, even if you are not familiar with the ancient game at all - do not worry, for you will surely have no problems learning the few rules you need to know.

**Chess Puzzles Series** includes games of varying degrees of difficulty. Some games or game levels are suitable even for kids 5-6 years old, whereas others may include (or rather generate) tasks difficult enough to puzzle a highly experienced grandmaster.

The principal motto of the series is, **Derive benefit from entertainment!**

What is the entertaining aspect of the puzzles all about? It consists in the interesting and fascinating play! In the possibility to compete with yourself and with others! And where does the benefit come in? Well, as you play, your **intellectual abilities** improve (probably without your noticing it!). These are speed of comprehension, memory, concentration of attention, logical and imaginative thinking, spatial imagination, the ability to precisely calculate the consequences of your actions, and many others. Psychological studies have shown that such abilities are the basis for success in secondary or high school studies as well as in business. Quite a few of these faculties are constituent parts of the chess abilities (which predetermine ones achievements in the game). Therefore the **Chess Puzzles** we offer will be of use to qualified chessplayers willing to make progress. Last but not least, our **Chess Puzzles** will also be of benefit to chess beginners, who are guaranteed to learn elementary chess skills and consolidate their knowledge while playing.

**AlterWay** is the second program in the series. It is aimed at developing heuristic and combinatory thinking as well as at improving the skill of distributing ones attention over the whole chessboard and taking decisions under conditions of time deficit. In the practical chess aspect the program helps consolidate knowledge about the chess pieces, their movements and captures; of particular importance is the fact that the program teaches to take note of available/prospective interaction between/among pieces and make perfect use of it.

All playing tasks are newly generated by the program, their number being virtually unlimited and the possibility of encountering the same situation twice practically equalling zero.

# Play and Training

**AlterWay** incorporates two modes. The basic one is **Play**;   there is   also an auxiliary mode called **Training**. The main differences between these two modes are as follows:

1 .  In the **Play mode** all tasks are given in a strictly pre-set sequence, in accordance with the difficulty levels; in the **Training mode** you can set any difficulty level you like;

2.  In the **Play mode** you get points for every task correctly performed; in the **Training mode** there are no points to be scored;

3.  In the **Training mode** you can use a **Hint**, retract a move, and restore the initial position of the current task (see 4.3), while in the **Game mode** this cannot be done;

4.  The **Playing mode** allows you to compete with friends or acquaintances or set individual score records, and thus find out about your progress in the game or your present-day intellectual shape; true, the **Training mode** provides for no such possibility, but on the other hand it helps you develop your abilities in a highly selective way, leading you to ever greater achievements in the game.

For a better understanding of the playing rules (which incidentally are the same in both modes) you are recommended to:

1.  Read Section 3 attentively
2.  Select the **Training mode**
3.  Choose one piece for yourself and 3-4 pieces for the opponent
4.  Click on the **Hint** button   to display information on how the task can be performed.

# Game Rules and Features

**Aim of the Game**
**No Passage Sign**
**Making Moves**
**Difficulty Levels**
**Points Score**

# Aim of the Game

Pieces of both colours are involved in the game. You play for one side (you can have any units except King and pawns) and the computer plays for the other (the opposing side can have any units except King). The choice of the side you will play for is entirely up to you. Any movements made on the board are your moves, the computer only devises puzzling positions and passively watches your actions, waiting for your error. Your task is to capture all of the other sides pieces; but **each of   your   moves must be a capture**.   That is, no non-capturing moves may be played.

If you succeed in capturing all of the opposing pieces, you win. But if there arises a situation when no more immediate captures can be played and on the chessboard still remains at least one enemy piece, you lose. Besides, you also lose when you have failed to perform the task within the allotted time interval.

What can be easier than to capture all pieces, you may say. However, that simplicity is deceptive. Because in almost any situation you will be faced with the possibility of not one but several seemingly alternative captures. And in each of such situations you will have to make a correct choice, deciding what to capture next and what route to follow. Thus, you will not be able to complete the task successfully unless you quickly discover and execute an optimum sequence of captures. But to do that will require much intellectual effort on your part!

In a lot of the tasks the goal can be achieved in several ways, though. The optimality of the route you have chosen is not evaluated by the program and does not affect the result. You can capture any one of the opponents units by any one of your own units (provided that the capture is legal). It is not necessary to use all of the available units to eliminate the opponents army: if you have several pieces, and are able to capture all enemy units using just one of them (e.g. a Queen), still it is a victory for you.

# No Passage Sign

Tasks of levels of difficulty higher than the initial one feature one more unit, a special, non-moving one. This piece resembles the traffic sign No Passage. It can occupy any square on the chessboard. Below we will refer to it as the **No Passage Sign**. So what does it mean?

A **No Passage Sign** is always motionless; it restricts the operative range of your pieces just like an ordinary piece of your colour would: you can neither pass through it nor capture it / step on it. A Knight can leap over it like over any other piece. There may be several such signs on the board. Usually their number increases with an increase in the number of enemy units. There is no other way these signs can affect the flow of the game except as described above.

# Making Moves

To make a move you must set the onboard cursor on the enemy piece to be captured (as you remember, non-capturing moves are not playable) and then press left mouse button. If only one of your pieces can capture the unit in question, the respective move will be performed immediately. But if at least two of your pieces can eliminate the indicated unit (for example, enemy Knight can be captured not only by Queen, which move you mean to make, but also with Bishop), then you will have to indicate the intended capturing piece as well. Set the cursor on it and once again press left mouse button. Those actions can be performed in reverse order, i.e. first you indicate the capturing piece and then the one to be captured. From the keyboard moves are made in an analogous way, using a square-shaped onboard cursor and the **Spacebar** key. To move the cursor across the board use the arrow keys **Left, Right, Up,** or **Down.**

# Difficulty Levels

The **Game mode** incorporates 10 levels of difficulty. The difficulty of a particular task is determined by the number of enemy pieces you must capture, the number of pieces at your disposal, and the time interval in which you must cope with the task. The more pieces are on the board, the more alternatives are available and hence the harder is the task. At each level you will be offered a total of 15 tasks. You will not be promoted to the next difficulty level unless you have coped with 12 out of the 15 tasks at the current level. If you fail to do that, the program brings you back to task number 1 at the current level. As it does so it cancels all of the points you have scored at that level.

# Points Score

For each task you have coped with the program gives you a certain number of points. The higher the difficulty level, the more points you get. Your score is displayed in the **Information panel**; besides, it is automatically saved to your personal file (you are to name the file in the **Set-up window** and, when it is high enough, to the **Top Results table**.

We remind you that no points can be scored in the **Training mode.** However, a record is kept of the number of tasks you have successfully performed.The program keeps a similar record in the **Playing mode**, too.

# Environment and Icons

**Information Panel**
**Menu Icons**

# Information Panel

In the left part of the main window there is a chess diagram where the main events of the game take place. Above the diagram you can see icons of the main commands. To the right of the diagram is the **Information panel** - the subject of this paragraph.

The upper half of the panel holds the following five icons:

Difficulty level at which the user currently stays;

Sequential number of the task at the present level;

Number of tasks already performed at the current level;

Time remaining before the expiry of the deadline for the current task;

Total number of points scored by user at the present and previous levels.

In the bottom part of the panel you can see pieces participating in the current game: both user-controlled units and the ones allotted to them. Note that by indicating how many enemy units are to be captured by a particular user-owned piece the program sort of hints at a possible way to solve the task.

# Menu Icons

The following button icons are available for faster access to the basic commands of the main menu:

## Next task [F2]

By clicking on this icon you skip the current task and get a new one instead. Note however that a skipped task counts as one in which you have failed, giving you zero points.

## Set-up [F3]

This command opens up the **Set-up window**. If you exit it without changing anything there then you get back to where you were before you ordered the window to be displayed (with the settings and the results staying the same). If you have changed the name of the file for your future work, then before giving you a new task the program saves all your current results to the file by the previous name.

## Top Results [F4]

By selecting this icon you display the **Top Playing Results** table.

## Exit [Alt-F4]

Understandably, this button icon is intended to exit **AlterWay**. But before being quitted the program saves all your current results   (except those pertaining to an unfinished game) to the file indicated in the **Set-up window**.

## Keyboard [F5]

If this option is on, the mouse is not switched off and can still serve to effect the desired moves, but now the keyboard can also be used for that purpose. After you have activated the **Keyboard** command a cursor in the shape of a square frame appears on one of the chessboard squares.

To make a move from keyboard use the arrow keys **Left, Right, Up,** or **Down** to shift the

diagram cursor to the desired square - and then press **Spacebar.**

## Help [F1]

Activation of the **Help** command displays a description of the programs playing rules and icons.

## Retract move [F6]

This icon is only available in the **Training mode**. Click on it to retract the move you have just made. Note that a move which has ended a game cannot be retracted.

## Restore position [F7]

This icon is only available in the **Training mode**. It allows to restore the initial position of the current task. It can be activated only after the first move has been made, and remains at your disposal till a game-concluding move occurs.

## Hint [F8]

This icon is only available for use in the initial position of a **Training mode** task. The very first move inactivates it. Clicking on the Hint icon displays a solution variation proposed by the program. Coloured dots and lines on the chessboard show the capturing routes for each of your pieces. The colour of the dots / lines is different for each piece. All you have to do is memorize the indicated routes and determine the sequence of the captures. When the Hint is on, no moves can be made on the board. To switch off the Hint click on that icon once again.

All of these commands can also be activated from the program menu or by using the functional keys presented above in square brackets.

# Games in the Chess Puzzles series

These are skill-developing games for children as well as adults. Your patient coach and uncompromising rival in the encounters will be your computer. Also, the PC will be generating countless numbers of intricate tasks at 10 levels of difficulty! In order to cope with them you will have to rack your brains a great deal. But that will make your brains still cleverer and your success steadier!

## Chess Miner   V.1.1

Only your opponent knows the routes his pieces take. But should you manage to unravel those routes and place your mines on the right squares the pieces will be blown up one by one, with you eventually emerging as the winner. This game is a good way of training your memory, watchfulness, and ability to discover regularities!

## AlterWay   V.1.1
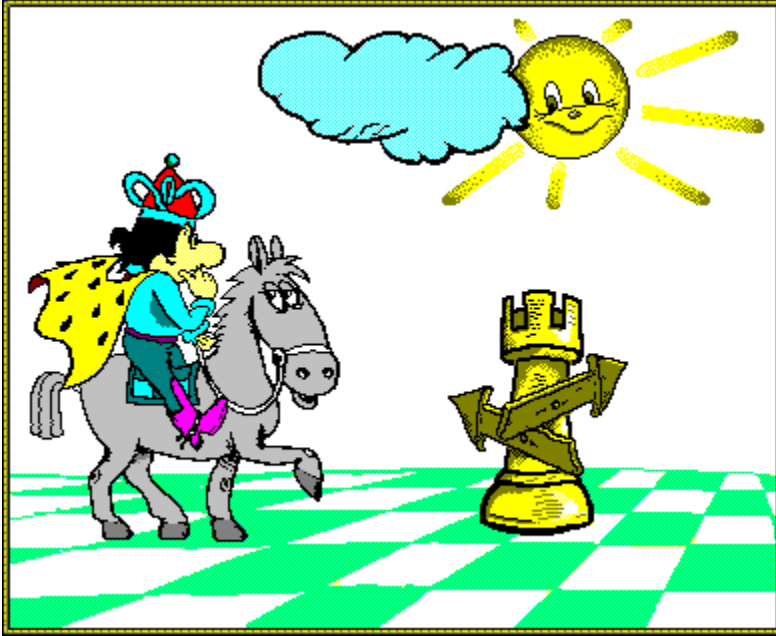
What should be the right sequence of capturing the computers pieces? You need to figure out everything in advance and start acting only afterwards. Because if in the end only one enemy piece remains on the chessboard, you lose. The game trains the ability to make fast and accurate calculations and the combinatory thinking.

## Last Move   V.1.1
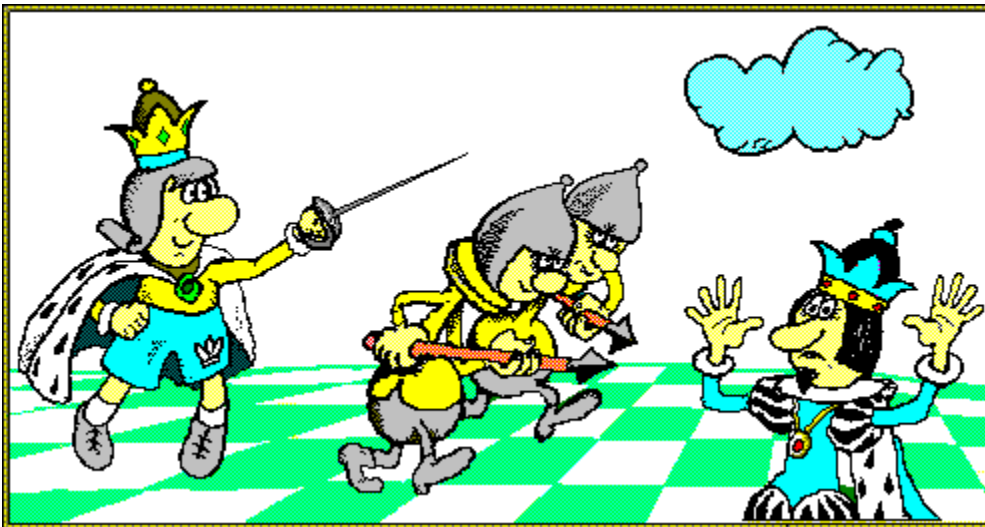


This is a generator of four fascinating games in which you are to apply different methods for weaving a mating net for the opponents King. Actually, only one move takes you to victory, but even that bagatelle is not always easy find... The game is meant to develop creative abilities, intuition, and the skill to make fast decisions.

**Chess Mazes   V.1.1**
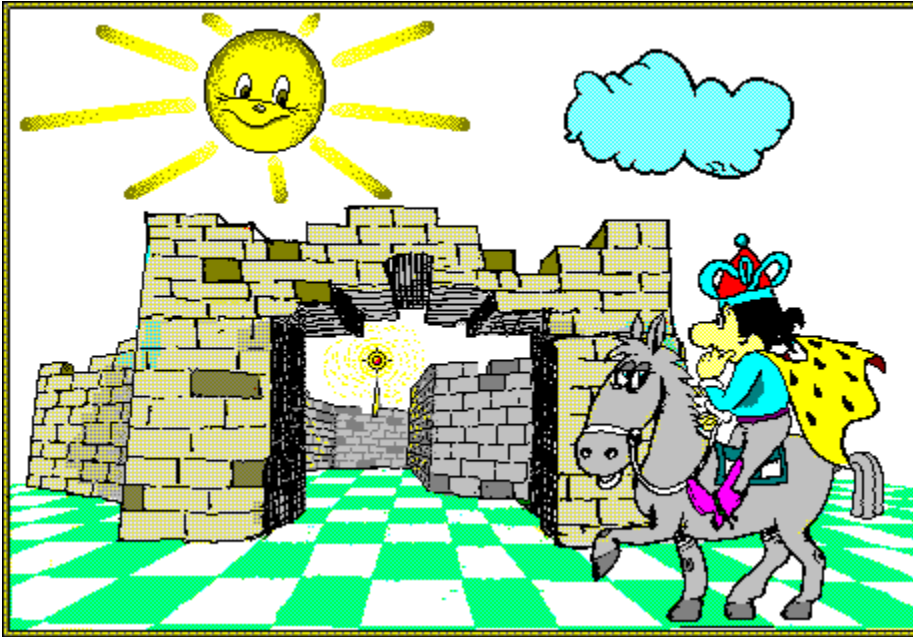


What is the best route to transfer your piece from one square to some other? Finding the shortest path will not always suffice; in addition, the pieces journey has to be safe. Indeed, the enemy men stay awake... The game trains the ability to manoeuvre and calculate accurately, operative thinking and memory.

# Options

### 1. Notation

Switching this option on displays chess notation by the diagram whereas switching it off removes the notation.


### 2. Animation

This option provides for manual setting of the speed at which the pieces move about the chessboard. If the movable scrolling square is in the leftmost position the speed is at its minimum; in contrast, the rightmost position is indicative of maximum animation speed.


### 3. Language

**AlterWay** is a multilingual program. By using the language option you can set any one of the languages available on the list and get all menu commands and messages displayed in the chosen language.


### 4. Keyboard

If this option is on, the mouse is not switched off and can still serve to effect the desired moves, but now the keyboard can also be used for that purpose. After you have activated the **Keyboard** command the cursor in the shape of a square frame appears on one of the chessboard squares.

To make a move from keyboard use the arrow keys **Left, Right, Up** and **Down** to shift the diagram cursor to the desired square - and then press **Spacebar**.


### 5. Cuptures

When this option is on, then before you make your next move you will get a hint from the program about captures that can be made with the piece you have chosen. To activate the option click on one of your pieces. Use of this option can be recommended to users who have only recently learned how the chess pieces move.


### 6. Colour

Choice of any one of the following commands allows you to change the colour   some of the chessboard elements:

**Light square**
Colour of the light squares**;**

**Dark square**
Colour of the dark squares;

**Queen route line**
Colour of dots and lines demonstrating a possible Queen route;

**Rook route line**
Colour of dots and lines demonstrating a possible Rook route;

**Bishop route line**
Colour of dots and lines demonstrating a possible Bishop route;

**Knight route line**
Colour of dots and lines demonstrating a possible Knight route;

Indicate the desired colour in the dialogue box displayed upon activation of the chosen colour selection command. You can also mix colours to produce a new one.

# Set-Up Window

If you are starting the program for the first time, then after the caption is gone the **Set-up window** opens up. Here you are prompted to:

1. Enter the name of the file to which your playing results are to be saved;

2. Select the mode for your work (**Play** or **Training**);

3. In case you have chosen the **Training mode**, set a difficulty level for the future tasks (number of your own pieces and of enemy units, as well as limitation of solution time).

## File name input

You can type in any name no more than 8 characters (letters, digits) long - or choose one from the available list. As you proceed, your results will be accumulated in the file under that particular name and preserved on hard disk. A new name can be entered from the keyboard only. To choose a name already on the list bring the cursor onto it and click left mouse button or press **Enter.**

## Mode selection

To select the desired mode click on the button icon **Play\Training**. It has two positions:



**Play**

When this icon position has been set,the program is in the **Play mode**. You can choose the colour of your pieces. Other options - choice of the number of and setting of solution time limitation - are not available here.



**Training**

If you have set this icon position, the program goes to the **Training mode**. All of the options - choice of the colour / number of the pieces, setting of solution time limitation - are available.

## Choice of the colour of your pieces

**Colour of
the pieces**

With the help of this icon you can choose the colour of your pieces for the game. The opposing side, naturally, will have pieces of the other colour.

## Choice of the Type and Number of the Pieces

In the **Training mode** you can choose the pieces you will play with (Queen, Rook, Bishop, Knight, or any combination thereof) and set the number of enemy pieces you will have to capture with your force. To effect the choice you are to use piece type indicating buttons.

Each time you touch a piece type button this changes the number of enemy units allotted to your piece, which is indicated in the box below the activated button. Note, however, that such allotment is purely conventional. Hence it is not necessary at all to make the indicated number of captures with that piece alone. According to the rules of the game, you can use any of the pieces at your disposal to make the captures.

The box below the last button (**Reset**) reflects the total number of already chosen enemy units. There may not be more than **18** (in some cases - **16-17**) of them on the board. Should that limit be exceeded, the **Reset** button becomes red and that means you cannot exit the **Set-up window** until you correct the problem. Clicking on the **Reset** button sets asterisks below all of the piece buttons. An asterisked piece does not participate in the game.

## Setting Time Limitation

**Timer**

To set a limitation to the time of solution use the **Timer** button. By clicking on it you can successively change the settings in the below box within the range between no time limitation (asterisks) and 30 seconds per task.

**Attention!**

If the program is restarted (i.e. not started for the first time), the **Set-up window** does not open up. The program loads by default the settings previously chosen by the user. To display the **Set-up window** activate the main menu command **Game\Set-up** or click on the **Set-up** icon.

# Registration

Enter your Name and License number and click on OK. If this number is correct the program immediately remove all of the registration messages as well as enable some additional, important features that are unavailable in the evaluation version.

Full version will become protected against illegal copying. It is highly recommended to keep your License number together with the Name you registered with. In that case you will be able to reconstruct the full version of program at any time and without any limitations except as expressly provided under the License Agreement (see Game\Read License).

If you have not yet license number, click on Cancel.