

HOW TO PLAY

>>> **FASTGAMMON** >>>

Version 1

- I. The Rules of Backgammon page 2
- II. Playing >>>FASTGAMMON>>> page 4
- III. Using >>>FASTGAMMON>>> to improve
your game page 7
- IV. Some Recommended First Moves back cover

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I. THE RULES OF BACKGAMMON

>>>FASTGAMMON>>> is designed so that the computer always plays by the rules and it checks to make sure that you do, too! So if you are a beginning player it's a good idea to start off by becoming familiar with the rules of the game. Experienced players can skip to Part II.

THE GAME

1. Backgammon is a two-person game. In >>>FASTGAMMON>>> the computer is one player (its men are O's) and you are the other (your men are X's).
2. At the start of a game, each side has 15 men positioned on the board as shown in Figure 1. The board is divided into four quarters having six points each. The two quarters on the right of Figure 1 are referred to as the inner boards or home boards. The quarters on the left are called the outer boards. The lower inner board is your home board, and it is from there that you will attempt to bear off your men. The upper inner board is the computer's home board.
3. You will move your men (X's) in a counter-clockwise direction, as shown by the arrow in Figure 1. The computer moves in the opposite direction.
4. Play of the men is based on the throw of two dice. In >>>FASTGAMMON>>>, a random number generator simulates the dice throw and the resulting roll is displayed on the screen.

BEGINNING PLAY

5. For the opening throw, each player rolls a single die. A tie requires another roll. The player that throws the highest number wins, and makes the first move using the count on the two dice. After the first move, each player in turn throws two dice.
6. In regular backgammon, a player's move is complete when he picks up his dice. A little more caution is needed when playing >>>FASTGAMMON>>>, as will be explained in Part II.

THE PLAY

7. Three types of moves are possible in backgammon:
 - (a) Entering a man from bar into the adversary's inner board;
 - (b) Moving a man from one point to another; and
 - (c) Bearing off a man from the home board when all men are either already home or on the home board.

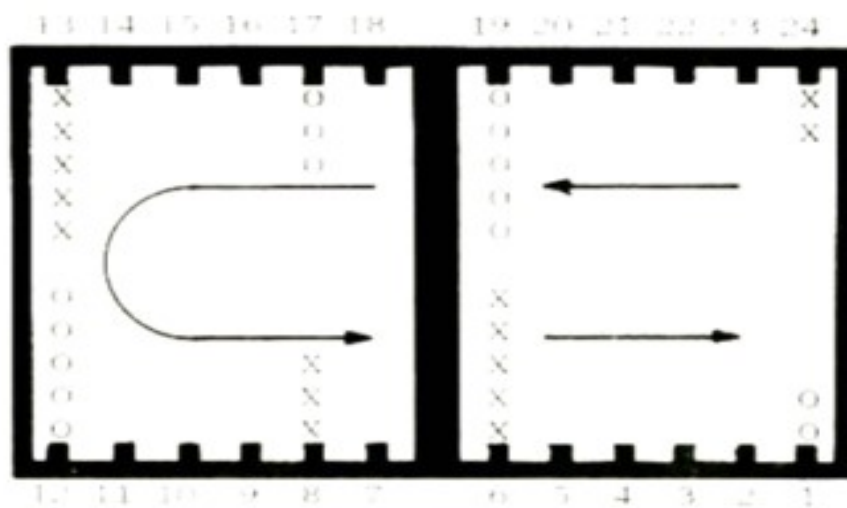


Figure 1. The Starting Position

8. The dice throw is used by moving one man the number of points on one die and then the same man or a different man the number of points on the other die. Doublets require four plays of the number on the dice.
9. Plays must be made for both dice if possible. Either number may be played first. If either number may be played, but not both, then the higher number thrown must be played.
10. A player having a man on bar may not play any other man until that man has been entered.

BLOCKING

11. No play may be made which lands on a point held by two or more of the adversary's men.

HITTING

12. When a play lands on a point occupied by a single man (blot) of the adversary's, such a man is "hit" and must be lifted from the board by the hitter and placed on bar in the center of the playing board, to await entry in accordance with rules 7(a) and 10.

BEARING OFF

13. When in a position to bear off in accordance with rule 7(c), a man may be borne off by one of two methods:
 - (a) the number on a thrown die is the same as the point the man is on, or
 - (b) the man is on the highest occupied point and the number on a thrown die is higher than that point number.

I The Rules of Backgammon (Continued)

Thus, if the number on a thrown die is the same as an unoccupied point, no man on a lower point can be borne off using that number while any man remains on a higher point. It is not required to bear off if a man can be moved forward on the home board.

SCORING

14. A game is won by the player who first bears off all of his men. A gammon (double game) is won if the adversary has not borne off a single man. A backgammon (triple game) is won if the adversary has not borne off a single man *and* has one or more men in the winner's inner table or on bar.

II. HOW TO PLAY >>>FASTGAMMON>>>

STARTING THE GAME

If you are successful at loading the >>>FASTGAMMON>>> program into your computer*, the following message will be displayed:

>>>FASTGAMMON>>>

DO YOU WANT TO START THE GAME WITH

1. A NEW SEQUENCE OF ROLLS, OR

2. THE SAME ROLLS AS THE PREVIOUS GAME?

SELECT "1" OR "2"

Selecting either "1" or "2" will cause the game board to be displayed on the screen. Most of the time you will want to select "1". The situations where you may want to select "2" are discussed in Part III.

The first roll will be displayed in the message area of the screen. If your roll is higher than the computer's, you will be prompted to enter your first move. If, however, the computer's roll is higher, the computer will proceed with its first move. Every time it is your turn to move, your roll will be displayed in the message area of the screen and you will be prompted to enter your first move.

* A separate instruction sheet for loading the program into your computer was included with your copy of >>>FASTGAMMON<<<.

MAKING A MOVE

The points on the board are uniquely numbered, and your men always move from a higher-numbered point to a lower-numbered point. Each move consists of moving one man the distance of *one* of the dice. Three types of moves are possible.

- (a) **MOVING OFF BAR** – If you have a man on bar, you must move this man first if you can. Input "B" for bar. A hyphen will appear automatically. Then enter the number of the point you want to move to (19-24), and hit return.
- (b) **MOVING FROM ONE POINT TO ANOTHER** – Enter the number of the point the man is currently on, then hit either the space bar or a hyphen and a hyphen will appear. Next enter the number of the point you wish the man to move to, and hit return.
- (c) **BEARING MEN OFF** – In >>>FASTGAMMON<<<, this is considered "bringing a man home," and an "H" is used to indicate home. First enter the number of the point the man is currently on, then hit either the space bar or a hyphen and a hyphen will appear. Next hit "H" and there is no need to hit return. Your man will be moved off if it is legal to do so, and your "in home" score at the bottom of the screen will be incremented.

CHANGING YOUR MIND

A word of caution: whenever you hit return or "H" and the move you have input is a legal one, there is no way to take back your move. Hitting return is equivalent to picking up your dice in backgammon, except that in >>>FASTGAMMON<<< you do it twice for each roll (four times for doubles).

However, there are two ways that you can correct an input you didn't want if you have not yet hit return. These are:

- (a) **BACKSPACING** – Typing a backspace will cause the cursor to back up and the number just entered to be erased.
- (b) **DELETING A LINE** – Typing an "at sign" (@) will move the cursor back to the beginning of the line and delete whatever has been entered on the line.

"ERROR"

If you happen to input a two-digit number greater than 29, the word "ERROR" will appear and you will have to re-input your move.

II How To Play >>> Fastgammon >>> (Continued)

"INCORRECT MOVE"

This message means you have not entered a legal move. You will have to enter a different move. Your "INCORRECT MOVE" may be due to several causes.

- (a) You have a man on bar and did not move him.
- (b) The number of points you want to move is not on a die or is on a die already used.
- (c) You do not have a man on the first point number entered.
- (d) The destination point is blocked by your opponent.
- (e) You have attempted to bear off a man improperly (see rule 13).

"CAN'T MOVE"

This (often exasperating) message occurs when it is your turn but the computer has checked and found that you have no (more) legal moves. You will not have a chance to enter a move and the computer will roll and proceed with its move.

ENDING A GAME PREMATURELY

There may be some occasions when you do not wish to play a game out to the very end. You can end any game prematurely whenever it is your turn to input a move by entering the word "END" instead of your move. This will clear the screen and display the starting message.

DISPLAY LIMITATIONS

The >>>FASTGAMMON>>> display has the following limitations:

- (a) A maximum of 10 men can be displayed on any one point; and
- (b) A maximum of 5 men can be displayed on bar.

We emphasize that these are only *display* limitations – the computer always knows exactly how many men are on each point or on bar. More than 10 men on a point is unusual, but it does occur, mostly on the one-point (or 24-point). When more than 10 men are on a point, ten will be displayed until one man is removed, then nine will be displayed. The display will continue to show nine men until only nine men are in fact on the point, and from then on the count will be accurate. A similar situation occurs when more than five men on the same side are on bar.

III. USING >>>FASTGAMMON>>> TO IMPROVE YOUR GAME

Whether you are a beginner or an experienced backgammon player, >>>FASTGAMMON>>> can help you improve your game. First of all, you now have an opponent that is always ready and willing to play. There is no substitute for experience—the more games you play the more you learn about backgammon. But there is another unique method by which >>>FASTGAMMON>>> can help you improve your game.

REPLAYING A GAME

By selecting "2" when the starting message is displayed, the same sequence of rolls that occurred in the game just played (the last game for which you selected "1") will occur again. Why would you want to play the same game over again? The two most important reasons are:

- (a) You want to see what the outcome would have been had you played differently
- (b) You know you made a bad move, and you want to play again and make the correct move.

If you lose a game to the computer, your first reaction may be that you made all the right moves—the computer just had the best rolls. This is almost always bad reasoning. There was likely at least one time during the game that you had a choice of moves where no one move seemed outstanding. Replay the game and make a different choice. If you are more successful the second time, think about the reasons why—it may have had more to do with probability than luck. Players far more skilled than the computer have learned from >>>FASTGAMMON>>> in this way.

HOW GOOD IS >>>FASTGAMMON>>>?

We make no claims that >>>FASTGAMMON>>> plays at an expert level. In fact, good players will notice obvious mistakes that the computer makes from time to time. The game of backgammon has many subtleties, and the algorithm programmed into version 1 of >>>FASTGAMMON>>> is a fairly simple one. There is an advantage that the computer has, however, over human players—the computer never forgets what it "knows". Due to oversights, distractions, or haste, human players often forget what they know. This fact is the edge that makes >>>FASTGAMMON>>> competitive against good players.

IV. SOME RECOMMENDED FIRST MOVES

The following initial moves are recommended by Jacoby and Crawford in *The Backgammon Book*.

Roll	Move		Roll	Move	
6 - 5	24-18, 18-13	*	5 - 1	13-8, 24-23	*
6 - 4	24-18, 18-14		4 - 3	13-9, 13-10	
6 - 3	24-18, 13-10		4 - 2	8-4, 6-4	*
6 - 2	24-18, 13-11		4 - 1	13-9, 24-23	
6 - 1	13-7, 8-7	*	3 - 2	13-10, 13-11	
5 - 4	13-8, 13-9	*	3 - 1	8-5, 6-5	*
5 - 3	8-3, 6-3	*	2 - 1	13-11, 24-23	
5 - 2	13-8, 13-11	*			

An asterisk (*) indicates that the computer's decision logic comes up with the same moves as the experts for the given roll. On other rolls, the computer goes its own way, generally preferring a more conservative play.



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FASTGAMMON

*Loading Instructions and
Additional Information For*

ATARI® CASSETTE VERSION T1

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LOADING FASTGAMMON

Place the FASTGAMMON cassette in the program recorder and rewind the tape. Turn off the computer. The FASTGAMMON program does not use the BASIC cartridge and it may be removed or left in, whichever you prefer. Most other Atari cartridges will have to be removed or the FASTGAMMON tape will not load in. While holding down the START key (on the lower right hand side of the keyboard), turn the computer on. You should hear a buzz, and the screen will remain blank except for a cursor. Depress the PLAY button on the program recorder and press RETURN on the keyboard. The tape will be loaded in. When this load is completed the FASTGAMMON program will be entered automatically.

STARTING THE GAME

The Atari version (T1 version) of FASTGAMMON has some additional features that are not in earlier versions and are not discussed in the accompanying booklet. The beginning message has been changed to read-

```
SELECT 1, 2, OR 3
  1. NORMAL START
  2. REPEAT PREVIOUS ROLLS
  3. CHANGE PARAMETERS
```

~~In addition~~, the type of dice rolls and display speed currently in effect are ~~also~~ displayed. When the program is loaded the options in effect are automatic rolls and average display speed. Selecting 1 will start a game using the indicated options. Selecting 2 will start a game using the indicated display speed, but the dice rolls will be the same rolls that occurred in the previous game regardless of the roll option selected. See the section "Replaying a Game" on page 7 of the instruction booklet.

Selecting 3 when the beginning message is on the video allows the player to reset the dice roll and display speed options. The following menu will appear first.

```
SELECT TYPE OF ROLLS
  1. AUTOMATIC
  2. MANUAL INPUT
```

Selecting 1 means that the dice will be "rolled" by the computer using a random number routine. Selection 2 is used when the player wishes to roll the dice for both himself and the computer and enter the dice rolls into the computer. See the section below entitled "Manual Dice Input".

After the type of rolls has been selected, the following menu appears:

```
SELECT DISPLAY SPEED
1. SLOW
2. AVERAGE
3. FAST
```

The slow speed should be used when playing FASTGAMMON for the first time or when others not familiar with the computer display are watching. Soon you will begin using the average speed, and better players who are familiar with the display will use the fast speed. Pay close attention when using the fast speed, however, because at this speed dice rolls only appear for a split second when there is a "can't move" situation.

After the display speed has been selected the beginning message reappears. The type of roll and display speed options just selected will be indicated. Press 1 or 2 to start a game.

RESTARTING A GAME

At the end of a game, the message "You win" or "Sorry you lose" will appear. At this point, pressing the RETURN key or most any other key will cause the beginning message to appear and allow you to start another game.

MANUAL DICE INPUT

When the manual dice input option is used, the dice will not be rolled and question marks will appear in the center of each die. To enter a value for a die, type a number from one to six. The message "OK?" will appear to the right of the die. If you change your mind, type another number. When the number displayed is the one you want, type Y to confirm the entry.

The opening roll is most important. The die on the left is the computer's first roll. The die on the right is the player's first roll. If the left-hand die is greater than the right-hand die, the computer will go first. If the right-hand die is higher, the player goes first.

Games using manually input dice rolls can be replayed and even though the computer appears to roll the dice, it remembers the manually input dice and displays them at the end of each "roll".

A WORD ABOUT GRAPHICS

This version of FASTGAMMON uses low resolution graphics (graphics mode 0). Although your Atari computer is capable of presenting high resolution graphics, high resolution requires much more memory. To accommodate those Atari owners who have only 8K of RAM, this version was designed to run in only 8K. Better graphics was sacrificed in order to include more good playing features.

A diskette version of FASTGAMMON is planned that will include high resolution graphics and some other improvements and will require 24K of RAM. Watch for Quality Software's ads in computer magazines for announcement of the diskette version. Owners of the T1 version will be eligible to receive a discount on orders of the diskette version.

CORRECTIONS TO INSTRUCTION BOOKLET

The section on "Display Limitations" at the bottom of page 6 is incorrect for the T1 version of FASTGAMMON. All 15 men will be displayed if they happen to end up on the same point. A maximum of eight men may be displayed on bar. Heaven forbid you should ever have more than eight men on bar!

On the back page an asterisk is used to indicate those first moves by the computer that are the same as those recommended by Jacoby and Crawford. Because the computer's logic has been improved since the booklet was written, an asterisk should now appear after the 6-3, 6-2, 4-3, and 3-2 moves. The asterisk after the 5-3 move should be removed [many experts prefer the computer's 5-3 move (two men down from the midpoint) to Jacoby's move (make the three point)].



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