A numbers game somewhat similar to bingo has features of player-selected numbers, a field of numbers for each number position, and a geometric pattern formed by the number positions. Played on either a card or on a video monitor, the game prompts the player to select preferably one number from each of a plurality of fields of numbers, each being in a different number position and a different part of the pattern. Numbers are randomly selected by the game provider, and a win is determined by matching the winning numbers in one or more number positions so as to form a segment of the pattern, or a group of positions which have been pre-designated as a winning combination.
Pick one number in each square. Fill the circle with Black!

Black out one Circle in each square

Card Void if more than one number per square is picked!
These are the numbers you are playing. Any errors must be brought to the attention of the house for correction prior to the start of the game.

Border Town Bingo
7 16 46 F
15 22 52 72

Four Games...$1.00
Amount Paid One Dollar

Upckem 8.30 PM
Valid for playing games: 5, 6, 7, 8...

Oct XX, 199x

BINGO
64
<table>
<thead>
<tr>
<th>Cell No.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
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<tbody>
<tr>
<td># of #s</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>8</td>
<td>10</td>
<td>6</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Odds</td>
<td>0.1429</td>
<td>0.1667</td>
<td>0.2000</td>
<td>0.1250</td>
<td>0.1000</td>
<td>0.1667</td>
<td>0.1667</td>
<td>0.1250</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Odds</th>
<th>1:</th>
<th>Hits/Cycle</th>
<th>PAY</th>
<th>PAYOUT</th>
<th>Reserve</th>
<th>Jackpot</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coverall</td>
<td>0.0000</td>
<td>4,838,400</td>
<td>1</td>
<td>$25,000.00</td>
<td>$25,000</td>
<td>$96,788</td>
</tr>
<tr>
<td>Diag (1234)</td>
<td>0.0006</td>
<td>1,680</td>
<td>2,880</td>
<td>250.00</td>
<td>720,000</td>
<td></td>
</tr>
<tr>
<td>Diag (5678)</td>
<td>0.0003</td>
<td>2,880</td>
<td>1,680</td>
<td>250.00</td>
<td>420,000</td>
<td></td>
</tr>
<tr>
<td>4 Corners</td>
<td>0.0004</td>
<td>2,240</td>
<td>2,160</td>
<td>100.00</td>
<td>216,000</td>
<td></td>
</tr>
<tr>
<td>4 in line (123)</td>
<td>0.0048</td>
<td>210</td>
<td>23,040</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>4 in line (234)</td>
<td>0.0042</td>
<td>240</td>
<td>20,160</td>
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<td>-</td>
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</tr>
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<td>0.0028</td>
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<td>-</td>
<td></td>
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<tr>
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<td>288</td>
<td>16,800</td>
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<td>-</td>
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<tr>
<td>Arm (12)</td>
<td>0.0238</td>
<td>42</td>
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<td>40</td>
<td>120,960</td>
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<td>604,800</td>
<td>1.00</td>
<td>604,800</td>
<td></td>
</tr>
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<td>7</td>
<td>691,200</td>
<td>1.00</td>
<td>691,200</td>
<td></td>
</tr>
<tr>
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<td>804,800</td>
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<td>-</td>
<td></td>
</tr>
<tr>
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<td>10</td>
<td>483,840</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

Jackpot Reserve: 2.00%  
Win Frequency: 37.07%  
Total: $3,512,200  
Payback: 71.14%  
Hold: 28.86%

FIG 4
BINGO TYPE NUMBERS GAME

BACKGROUND OF THE INVENTION

[0001] This invention concerns games, and in particular encompasses a numbers selection game having some similarity to bingo and also similarity a lottery numbers game. The game is adapted for gambling, in a casino or elsewhere, and may be played using game cards or in a video game format.

[0002] Lottery games are very well known, operated by a number of states in the U.S. In a lottery game, a player chooses several numbers from one or several fields of numbers. For example, in many states a player picks six numbers from a single field of numbers, typically from the number 1 to approximately 50, with no number to be repeated. The goal is to correctly pick a certain number of numbers to match some or all of the numbers that will be randomly selected by the operators of the lottery game.

Unlike bingo, the object in a lottery game is not to form a visual pattern on a card by the correct selection of numbers matching randomly selected numbers, but rather to select a designated number of numbers that will match subsequently selected random numbers.

[0003] In a traditional bingo game, randomly selected numbers are drawn from a single field of seventy-five numbers. Under the usual game rules, the player’s card consists of twenty-five number positions printed on a card, aligned in five rows and five columns as a matrix. A winner is declared by a player’s achievement of a pre-selected arrangement of numbers which match the winning numbers. This may be a horizontal line of matching numbers, a vertical line, a diagonal or other pattern which is pre-announced to the players.

[0004] In some bingo games there have been geometric patterns or other patterns designated as winning patterns, and these have sometimes included a pattern of the letter “X”, as formed by intersecting diagonals. This has simply been one of a number of different patterns designated as winning patterns for particular bingo games, formed by positions within the bingo matrix of typically twenty-five numbers.

[0005] In traditional bingo, the player does not select any of the numbers, but is issued a card wherein the numbers are organized in a particular way, presumably different from any other bingo card within the same game. However, there have been bingo-type games in which the player was able to pick some or all of the numbers for the player’s own card. For example, see U.S. Pat. No. 5,494,293.

[0006] In addition to the above patent, the following U.S. patents may have some pertinence to this invention: U.S. Pat. Nos. 6,227,025, 6,220,596, 5,957,457, 5,909,875, 5,823,534, 5,813,911, 5,782,470, 5,711,527, 5,624,119, 4,999,001, 4,611,811, 4,252,322, 4,118,035, 3,949,993 and Des. 351,624.

SUMMARY OF THE INVENTION

[0007] In the game of this invention, numbers are randomly selected by the “house” from several different fields of numbers. For a player to win, the numbers on the player’s card that match the randomly selected numbers must form a geometric pattern, or a portion of a pattern that has been pre-designated as a winning pattern. Preferably there are as many separate fields of numbers as there are number positions on the player’s card. The player selects from these fields of numbers, the numbers that will be the player’s numbers. In one implementation of the game, these numbers designated by the player are then printed at each respective number position on the player’s actual game card. In the game of the invention, the number positions are not simply in a matrix of row and columns as in traditional bingo, but are in a pattern that has been selected by the “house”, or by the conductor of the game. One such pattern is a letter “X”.

[0008] Other patterns are possible, all (including the “X” pattern) being referred to herein as geometric patterns. These can include, for example, a square, a rectangle, a triangle, an asterisk, another letter of the alphabet, a stick figure, even a circle, which may have separate segments designated.

[0009] Accordingly, in one implementation of the invention a method for playing a game of numbers includes providing a playing field with a plurality of number positions arranged in a pattern, the pattern having segments each with number positions defining the segment. A field of player-selectable numbers is established and presented to the player for that number position. The player is instructed as to what constitutes a winning play, in accordance with pre-selected criteria as to winning combinations of segments or positions. The game is played by random selection from each field of a number as winning number for that field and number position, thus defining the game pattern with the winning numbers randomly selected. The winning numbers are displayed to the player, preferably as they are selected, so the player can determine whether any of the player-selected numbers matches the winning number for each number position. A winner is declared for any player having numbers matching the winning numbers in accordance with the pre-selected criteria.

[0010] It is among the objects of the invention to establish a game which is easily and quickly played and in which the player has more control than bingo, by being able to select numbers. A further object is to play the game in a certain desired pattern, not as a winning pattern to be found among a matrix of rows and columns of a large number of number positions, but with the fields of numbers set out in a configuration that forms a relatively simple geometric pattern. These and other objects, advantages and features of the invention will be apparent from the following description of preferred embodiments, considered along with the drawings.

DESCRIPTION OF THE DRAWINGS

[0011] FIG. 1 is a schematic plan view showing an example of a number picking card for a player in one embodiment of the invention.

[0012] FIG. 2 is a schematic plan view showing an example of an official game card for a player of the game, reflecting the numbers which were selected by the player in accordance with FIG. 1.

[0013] FIG. 3 is a schematic plan view showing a card, board or other representation for advising the player, prior to playing the game, what patterns of matching numbers will constitute winning combinations.
FIG. 4 shows an example of a spreadsheet generated by a computer program to allow the “house” to select variables for the game and to predict payout based on selected parameters.

FIG. 5 is schematic view showing an example of a display for the game of the invention using a video monitor rather than a play card.

DESCRIPTION OF PREFERRED EMBODIMENTS

In the drawings, FIGS. 1 through 3 show one example of an implementation of the bingo-type game of the invention. In this example the pattern formed by the number fields is the letter “X”, but, as explained above, many other geometric patterns can be employed. In broadest terms the invention encompasses any pattern, so long as each of the random numbers selected is selected from a separate field or pool.

In this implementation of the game there are eight number positions, as shown on a player’s number selection card 10 in FIG. 1. Number positions, each with a box with a field of numbers for use in the player’s selection, are shown at 12, 13, 14, 15, 18, 19, 20 and 21. A ninth number position is shown at 22, but this is designated as a “free” position, always counted as a match for purposes of determining a winner. All of the positions 12 through 22 are herein referred to as number positions, even though the center position 22, where the lines of the “X” intersect, is preferably a free position.

As noted above, within each of the eight number positions 12-21, there is a field of numbers. The number of positions in each of the eight fields determines the mathematical probability of a particular number being randomly selected from that field, and therefore determines the probability of a player’s selecting, in advance of the random selection of winning numbers, the numbers that will match. Thus, the field 12 shows seven numbers (1-7), while the fields 14 and 15 show six numbers and the field 13 shows eight numbers. The fields 20 and 21 both have eight numbers in this example, while the field 18 has six numbers and field 19 has only five numbers. A myriad of combinations is possible.

The house can change the probability of a winning pattern being formed on a player’s card by varying the number of numbers in one or more of the separate fields of numbers in the number positions. Thus, to decrease the frequency of winners, more numbers may be added to one or more of the fields.

In implementation of the game, a computer program can be delivered with the game, that program including a spreadsheet serving as a menu, programmed to permit the house to change the variables of the game, including the number of numbers in each of the fields of numbers. Also controlled via the program can be the designation of number positions on the card to constitute a winning pattern, and the value of prizes that will be awarded for each of the winning patterns. In one game there can be several different winning patterns, as indicated in FIG. 3. The program also permits the house to see the effect on revenues and win frequencies caused by denoting different patterns as winners, by changing the number of numbers in the fields of the various number positions, and by designating different prize amounts. An example of a spreadsheet is shown in FIG. 4.

Within a preferred embodiment, the player of the game picks one number from each of the separate fields of numbers. The game can be played either in a paper card version or as a video game. In the paper card version, the player selects numbers on a card such as shown in FIG. 1, which can be by blacking the selected numbers, then turns in the card to the house, or provider of the game, and receives a game card printed with player’s selected numbers, and this may be in a form such as shown in FIG. 2. This can be called a bingo card. As seen in FIG. 2, the players-elect numbers, in combination with the “free” number position 22, form the letter “X”.

After all players have selected numbers and have obtained player cards 25, the house randomly selects numbers for each field which is to be in the game, usually one from each field. The randomly selected numbers are displayed, preferably as they are picked, so as to be seen by the players. The display employed can be a video monitor or any other medium that will display the selected numbers, and preferably the selection process. Each successive game preferably has a unique game number, or the game can be identified by date and time played, as indicated at 26 in FIG. 2. Also, the card 25 may have a unique card number as shown 28.

As noted above, FIG. 3 shows a card 30 or other form of display, visible to or provided to the player prior to playing the game, indicating what combinations of matching number positions will constitute a win. In this case, FIG. 3 shows six different ways to win, from the highest payout with all number positions matching, to the minimum payout with any single corner matching the winning number. The center number position may be a “free” position as noted above; FIG. 3 only shows this position blackened if required to form a diagonal or a line.

In a video version of the game, video monitors are provided for each individual player. The bingo “card” is displayed on the monitor, which can be generally as shown in FIG. 5. An electronic means is used to allow the player to select a number from each of the fields of numbers, for example by displaying the card on a touch screen video monitor which permits the player to select numbers by touching the number to be selected in each field. Alternatively, a keypad can be provided, with prompts to the player to indicate which field is up for selection. As an alternative, the game can be played using a computer and video monitor for each player, with each computer and display as an independent player unit, or with the computers linked together in a network.

As explained above, the player is awarded a prize if the number selected by player matches such of the randomly selected numbers so as to form a winning pattern, and various patterns can be defined in advanced as shown in FIG. 3. Various values of prizes can be awarded for different patterns, or different segments of the geometric shape, that are formed by the matching numbers. The higher the odds against achieving certain patterns (such as the coverall pattern), the higher the prize values which will be paid.

The game can include a progress feature. With that feature, a percentage of the money paid by players to play...
the game is set aside into a progressive prize pool, which will be paid to the player whose eight selected numbers match the eight randomly selected numbers, as shown in the “coverall” pattern in FIG. 3. Linking the games in multiple casinos can expand the progressive prize feature, so that with the increased number of players, the progressive prize increases substantially.

[0027] As noted above any pattern can be employed so long it is adaptable to designating a winning position or progression of positions. The pattern can be of an alphabet letter, a number, a geometric pattern, etc., or simply a matrix as in regular bingo.

[0028] The above described preferred embodiment is intended to illustrate the principles of the invention, but not to limit its scope. Other embodiments and variations to this preferred embodiment will be apparent to those skilled in the art and may be made without departing from the spirit and scope of the invention as defined in the following claims.

1. A game of picking numbers, comprising:
   a playing field with a plurality of number positions arranged in a pattern,
   a field of player-selectable numbers for each number position, with indication to the player of the numbers in each field for selection of at least one number therefrom, for each position,
   winning number selection means outside the control of the player for selecting from each field a number as a winning number for that field, and
   whereby a winning play can be defined by a player’s correctly selecting numbers matching winning numbers in a designated group of number positions or a single position designated to constitute a winner.

2. The game of claim 1, wherein the pattern comprises substantially an X configuration.

3. The game of claim 2, wherein the X configuration has a number position at an intersection of two lines forming the X, such number position being free and without a field of numbers, always counted as a match in that position.

4. The game of claim 1, wherein some of the number positions have fields with more numbers than other number positions.

5. The game of claim 1, wherein the fields of numbers in each number position each contain unique numbers not found in any other field.

6. The game of claim 1, including means for advising the player of the winning number for each field so that the player can determine matches.

7. The game of claim 6, wherein the means for advising comprises a video screen on which the winning numbers are announced.

8. The game of claim 1, wherein said pattern is a geometric pattern.

9. The game of claim 8, wherein the geometric pattern has at least three linear segments, said designated group of number positions forming a segment or part of a segment.

10. The game of claim 1, wherein the pattern comprises essentially X configuration with two lines of number positions forming four segments.

11. The game of claim 10, wherein each segment includes at least two number positions.

12. The game of claim 1, wherein the pattern has segments each defined by a plurality of number positions, said designated group of number positions forming a segment or part of a segment.

13. A method for playing a game of numbers, comprising:
   providing a playing field with a plurality of number positions arranged in a pattern,
   establishing and presenting to the player a field of player-selectable numbers for each number position, and providing instruction to the player to select from each field a number, thus being the player’s number for each position,
   instructing the player as to what will constitute a winning play, in accordance with pre-ordained criteria as to winning combinations of positions,
   outside the control of the player, selecting from each field a number as winning number for the field and number position,
   displaying the winning numbers of the pattern to the player so that the player can determine whether any of the player-selected numbers matches the winning number for each number position, and
   declaring a winner for any player having numbers matching the winning numbers in accordance with the pre-ordained criteria as to winning combinations of positions.

14. The method of claim 13, wherein the playing field is on a player card, with provision for the player’s choosing a number from each field by hand, and including providing a player with a new card showing the player-selected numbers in the pattern, after the player made number selections.

15. The method of claim 13, wherein in the playing field is provided on a video screen.