## REWARD System - For Even Money Bet in Roulette By Izak Matatya

By even money betting we mean betting on Red or Black, High or Low, Even or Odd, because they pay 1 to 1 . With the exception of the green zeros, those areas cover half the numbers. The probability of their occurrence is nearly $50 \%$, almost like flipping a coin. On the long run, we can expect half of all bets being Red, Black, High, Low, Even or Odd. But this means over millions of spins.

We are not interested in playing so many spins. If we do, with flat bets, the casino will win $5.26 \%$ of everything you have wagered because of the zeros, that are to come once every 19 spins in average in American double zero wheel and once every 37 spins in average in European single zero wheel.

What we are interested in is making profits betting on even betting areas, over a certain period of time. There have been numerous systems designed so far for even areas, such as the double up Martingale system, the D'Alembert system, LaBouchere, Oscar's grind, etc., which work for a while, then wipe out your bankroll, the moment they fail, eliminating all the profits you have made so far.

If they were no table limits, even the most classic system, such as Martingale would beat the casino. You start by placing one unit on the table. If you lose, you double your bet. If you lose again, you double again, until finally you win and profit one unit. Some people bet on a certain colour, say on Red. Let's say you keep betting on Red, and Black comes up for 9 times in a row, before Red finally hits. You would be placing $1+2+4+8+16+32+64+128+256+512=$ 1023 chips on the table to win 1 unit profit. If your unit value is $\$ 10$, would you risk $\$ 10,230$ to profit only $\$ 10$ ? What if Black comes up 14 or 18 times before Red shows up. Calculate how much you need to put on the table for just 1 chip gain. Nevertheless if the table had absolutely no limits, you would win your chip even if you have to invest \$50,000 for it.

But the table does have limits, and this is what makes most systems fail, except for the one you are about to read.

First of all, it is important to observe patterns of even money areas, rather than betting on one color. For the sake of this document, I will refer only to color bets, i.e. Red and Black, although the system can be applied to all even money bet areas, such as High/Low and Even/Odd. What do we mean with patterns? Red and Black may come up in an alternating manner, such as one Red, one Black, one Red, one Black, etc. We'll call that a zig-zag pattern. Sometimes, they chop with a double appearance, that is, two Reds, two Blacks, one Red, two Blacks, etc. We'll refer to this as a quasi zig-zag pattern. And sometimes, you have longer streaks of either Reds or Blacks. We'll call this a string pattern or a streak of a specific color.

One more feature that we need to observe is the frequency of the variation of those patterns, that is, how often does a zig-zag pattern switch to a quasi zig-zag or to a string pattern and vice versa. Do zig-zag patterns follow each other? Do we have long streaks of Reds followed by long streaks of Blacks?

Those are important questions for this system, not only for the system to be successful, but also to avoid reaching table limits. As I said before, even a Martingale can be successful, particularly if it is used cautiously. What do we mean to use it cautiously? We could use it, for instance, not to exceed 5 steps. A 5 step Martingale progression would be 1, 2, 4, 8, 16 units. With $\$ 10$ chips, it would be $\$ 10, \$ 20, \$ 40, \$ 80, \$ 160$. With $\$ 50$ chips, it would be $\$ 50, \$ 100, \$ 200$, $\$ 400$ and $\$ 800$, etc.

I find it much more effective to bet on a color that repeats, following the last decision, rather than on one specific one. This has many advantages. First of all, if you get a streak of a specific color, and you will many times, you win spin after spin. If you get a quasi zig-zag pattern, you will win every time the color repeats. Just observe Roulette scoreboards, you will be amazed about the number of times a color repeats. And when it goes zig-zag, it doesn't last too long, maybe 6-7 times tops until there is a repeat in between or the whole pattern turns into long streaks.

The systems described in this document will all be based on repeating colors or even money bet areas. It will be very rewarding. That's where the name of the system comes from and think of the word REWARD as an acronym meaning: Repeating Even Win A Red Double.

If we were to bet on a color that just came up, we would be betting on a repeat color. That means if Black came up, our next bet is placed on Black. If Red came up, we place our next bet on Red, etc. If a zero comes up, then we place our bet on the last color that was there before the zero. You would be very successful if you were to limit Martingale to 4 or maximum 5 steps and would bet on a repeating color after you have observed one or a sequence of zig-zags and then bet following the color that just came up, catching streaks of Reds or Blacks.

You need not really wait too long, before this opportunity shows up. You can be sitting at a table, where you could see scoreboards of other tables and it is very easy to see, that a table is choppy where Reds and Blacks alternate very often. Also, it is easy to see long streaks of Reds and Blacks. If you don't want to move around you can track other even areas at the same table by observing patterns of Evens/Odds, or Lows/Highs.

In summary, if you wait for a zig-zag pattern of any even money betting area until a repeat that marks the end of the zig-zag and apply a 4-5 step Martingale, you can be sure of winning 5-10 bets in a row.

Table 1 below will illustrate this. The column Count Losses will count the number of times the color alternates before it wins. As long as this count is less or equal to 5 , the runs ends with a unit profit according to 5 step Martingale. The column End of Lost Run will turn to an " E ", when the 5 step Martingale fails and we lose 31 units (the sum of $1,2,4,8,16$ ).

## Table 1:

| Seq \# | Number | Red / Black | W/L | Count Losses | Units Won/lost | End of lost run | Net Units |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 27 | R |  | 0 |  |  |  |
| 2 | 35 | B | L | 1 | 0 |  | 0 |
| 3 | 23 | R | L | 2 | 0 |  | 0 |
| 4 | 33 | B | L | 3 | 0 |  | 0 |
| 5 | 26 | B | W | 0 | 1 |  | 1 |
| 6 | 23 | R | L | 1 | 0 |  | 1 |
| 7 | 31 | B | L | 2 | 0 |  | 1 |
| 8 | 3 | R | L | 3 | 0 |  | 1 |
| 9 | 33 | B | L | 4 | 0 |  | 1 |
| 10 | 22 | B | W | 0 | 1 |  |  |
| 11 | 18 | R | L | 1 | 0 |  | 2 |
| 12 | 35 | B | L | 2 | 0 |  | 2 |
| 13 | 15 | B | W | 0 | 1 |  | 3 |
| 14 | 26 | B | W | 0 | 1 |  | 4 |
| 15 | 11 | B | W | 0 | 1 |  | 5 |
| 16 | 23 | R | L | 1 | 0 |  | 5 |
| 17 | 18 | R | W | 0 | 1 |  | 6 |
| 18 | 9 | R | W | 0 | 1 |  | 7 |
| 19 | 7 | R | W | 0 | 1 |  | 8 |
| 20 | 12 | R | W | 0 | 1 |  | 9 |
| 21 | 34 | R | W | 0 | 1 |  | 10 |
| 22 | 7 | R | W | 0 | 1 |  | 11 |
| 23 | 22 | B | L | 1 | 0 |  | 11 |
| 24 | 14 | R | L | 2 | 0 |  | 11 |
| 25 | 29 | B | L | 3 | 0 |  | 11 |
| 26 | 14 | R | L | 4 | 0 |  | 11 |
| 27 | 18 | R | W | 0 | 1 |  | 12 |
| 28 | 10 | B | L | 1 | 0 |  | 12 |
| 29 | 30 | R | L | 2 | 0 |  | 12 |
| 30 | 14 | R | W | 0 | 1 |  | 13 |
| 31 | 19 | R | W | 0 | 1 |  | 14 |
| 32 | 5 | R | W | 0 | 1 |  | 15 |
| 33 | 16 | R | W | 0 | 1 |  | 16 |


| 34 | 25 | R | W | 0 | 1 |  | 17 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 35 | 33 | B | L | 1 | 0 |  | 17 |
| 36 | 12 | R | L | 2 | 0 |  | 17 |
| 37 | 23 | R | W | 0 | 1 |  | 18 |
| 38 | 19 | R | W | 0 | 1 |  | 19 |
| 39 | 35 | B | L | 1 | 0 |  | 19 |
| 40 | 5 | R | L | 2 | 0 |  | 19 |
| 41 | 31 | B | L | 3 | 0 |  | 19 |
| 42 | 4 | B | W | 0 | 1 |  | 20 |
| 43 | 35 | B | W | 0 | 1 |  | 21 |
| 44 | 0 | G | L | 1 | 0 |  | 21 |
| 45 | 21 | R | L | 2 | 0 |  | 21 |
| 46 | 16 | R | W | 0 | 1 |  | 22 |
| 47 | 9 | R | W | 0 | 1 |  | 23 |
| 48 | 32 | R | W | 0 | 1 |  | 24 |
| 49 | 21 | R | W | 0 | 1 |  | 25 |
| 50 | 24 | B | L | 1 | 0 |  | 25 |
| 51 | 2 | B | W | 0 | 1 |  | 26 |
| 52 | 3 | R | L | 1 | 0 |  | 26 |
| 53 | 17 | B | L | 2 | 0 |  | 26 |
| 54 | 33 | B | W | 0 | 1 |  | 27 |
| 55 | 26 | B | W | 0 | 1 |  | 28 |
| 56 | 22 | B | W | 0 | 1 |  | 29 |
| 57 | 16 | R | L | 1 | 0 |  | 29 |
| 58 | 28 | B | L | 2 | 0 |  | 29 |
| 59 | 23 | R | L | 3 | 0 |  | 29 |
| 60 | 7 | R | W | 0 | 1 |  | 30 |
| 61 | 4 | B | L | 1 | 0 |  | 30 |
| 62 | 12 | R | L | 2 | 0 |  | 30 |
| 63 | 11 | B | L | 3 | 0 |  | 30 |
| 64 | 3 | R | L | 4 | 0 |  | 30 |
| 65 | 17 | B | L | 5 | -32 | E | -2 |
| 66 | 27 | R | L | 1 | 0 |  | -2 |
| 67 | 24 | B | L | 2 | 0 |  | -2 |
| 68 | 2 | B | W | 0 | 1 |  | -1 |
| 69 | 26 | B | W | 0 | 1 |  | 0 |
| 70 | 19 | R | L | 1 | 0 |  | 0 |
| 71 | 18 | R | W | 0 | 1 |  | 1 |
| 72 | 3 | R | W | 0 | 1 |  | 2 |
| 73 | 26 | B | L | 1 | 0 |  | 2 |
| 74 | 35 | B | W | 0 | 1 |  | 3 |
| 75 | 8 | B | W | 0 | 1 |  | 4 |
| 76 | 20 | B | W | 0 | 1 |  | 5 |
| 77 | 13 | B | W | 0 | 1 |  | 6 |
| 78 | 28 | B | W | 0 | 1 |  | 7 |
| 79 | 13 | B | W | 0 | 1 |  | 8 |
| 80 | 13 | B | W | 0 | 1 |  | 9 |


| 81 | 1 | R | L | 1 | 0 | 9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 82 | 4 | B | L | 2 | 0 | 9 |
| 83 | 00 | G | L | 3 | 0 | 9 |
| 84 | 17 | B | W | 0 | 1 | 10 |
| 85 | 22 | B | W | 0 | 1 | 11 |
| 86 | 23 | R | L | 1 | 0 | 11 |
| 87 | 9 | R | W | 0 | 1 | 12 |
| 88 | 16 | R | W | 0 | 1 | 13 |
| 89 | 15 | B | L | 1 | 0 | 13 |
| 90 | 10 | B | W | 0 | 1 | 14 |
| 91 | 13 | B | W | 0 | 1 | 15 |
| 92 | 25 | R | L | 1 | 0 | 15 |
| 93 | 31 | B | L | 2 | 0 | 15 |
| 94 | 34 | R | L | 3 | 0 | 15 |
| 95 | 28 | B | L | 4 | 0 | 15 |
| 96 | 20 | B | W | 0 | 1 | 16 |
| 97 | 00 | G | L | 1 | 0 | 16 |
| 98 | 11 | B | W | 0 | 1 | 17 |
| 99 | 6 | B | W | 0 | 1 | 18 |
| 100 | 19 | R | L | 1 | 0 | 18 |
| 101 | 36 | R | W | 0 | 1 | 19 |
| 102 | 32 | R | W | 0 | 1 | 20 |
| 103 | 12 | R | W | 0 | 1 | 21 |
| 104 | 00 | G | L | 1 | 0 | 21 |
| 105 | 21 | R | W | 0 | 1 | 22 |
| 106 | 28 | B | L | 1 | 0 | 22 |
| 107 | 1 | R | L | 2 | 0 | 22 |
| 108 | 24 | B | L | 3 | 0 | 22 |
| 109 | 20 | B | W | 0 | 1 | 23 |
| 110 | 2 | B | W | 0 | 1 | 24 |
| 111 | 30 | R | L | 1 | 0 | 24 |
| 112 | 3 | R | W | 0 | 1 | 25 |
| 113 | 21 | R | W | 0 | 1 | 26 |
| 114 | 00 | G | L | 1 | 0 | 26 |
| 115 | 5 | R | W | 0 | 1 | 27 |
| 116 | 33 | B | L | 1 | 0 | 27 |
| 117 | 6 | B | W | 0 | 1 | 28 |
| 118 | 13 | B | W | 0 | 1 | 29 |
| 119 | 7 | R | L | 1 | 0 | 29 |
| 120 | 3 | R | W | 0 | 1 | 30 |
| 121 | 29 | B | L | 1 | 0 | 30 |
| 122 | 10 | B | W | 0 | 1 | 31 |
| 123 | 14 | R | L | 1 | 0 | 31 |
| 124 | 2 | B | L | 2 | 0 | 31 |
| 125 | 11 | B | W | 0 | 1 | 32 |
| 126 | 0 | G | L | 1 | 0 | 32 |
| 127 | 21 | R | L | 2 | 0 | 32 |


| 128 | 22 | B | L | 3 | 0 | 32 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 129 | 31 | B | W | 0 | 1 | 33 |
| 130 | 14 | R | L | 1 | 0 | 33 |
| 131 | 10 | B | L | 2 | 0 | 33 |
| 132 | 12 | R | L | 3 | 0 | 33 |
| 133 | 8 | B | L | 4 | 0 | 33 |
| 134 | 28 | B | W | 0 | 1 | 34 |
| 135 | 26 | B | W | 0 | 1 | 35 |
| 136 | 30 | R | L | 1 | 0 | 35 |
| 137 | 11 | B | L | 2 | 0 | 35 |
| 138 | 6 | B | W | 0 | 1 | 36 |
| 139 | 35 | B | W | 0 | 1 | 37 |
| 140 | 16 | R | L | 1 | 0 | 37 |
| 141 | 27 | R | W | 0 | 1 | 38 |
| 142 | 2 | B | L | 1 | 0 | 38 |
| 143 | 15 | B | W | 0 | 1 | 39 |
| 144 | 12 | R | L | 1 | 0 | 39 |
| 145 | 00 | G | L | 2 | 0 | 39 |
| 146 | 25 | R | W | 0 | 1 | 40 |
| 147 | 1 | R | W | 0 | 1 | 41 |
| 148 | 32 | R | W | 0 | 1 | 42 |
| 149 | 5 | R | W | 0 | 1 | 43 |
| 150 | 24 | B | L | 1 | 0 | 43 |
| 151 | 4 | B | W | 0 | 1 | 44 |
| 152 | 28 | B | W | 0 | 1 | 45 |
| 153 | 28 | B | W | 0 | 1 | 46 |
| 154 | 2 | B | W | 0 | 1 | 47 |
| 155 | 12 | R | L | 1 | 0 | 47 |
| 156 | 15 | B | L | 2 | 0 | 47 |
| 157 | 14 | R | L | 3 | 0 | 47 |
| 158 | 35 | B | L | 4 | 0 | 47 |
| 159 | 4 | B | W | 0 | 1 | 48 |
| 160 | 18 | R | L | 1 | 0 | 48 |
| 161 | 32 | R | W | 0 | 1 | 49 |
| 162 | 31 | B | L | 1 | 0 | 49 |
| 163 | 19 | R | L | 2 | 0 | 49 |
| 164 | 24 | B | L | 3 | 0 | 49 |
| 165 | 31 | B | W | 0 | 1 | 50 |
| 166 | 26 | B | W | 0 | 1 | 51 |
| 167 | 9 | R | L | 1 | 0 | 51 |
| 168 | 30 | R | W | 0 | 1 | 52 |
| 169 | 19 | R | W | 0 | 1 | 53 |
| 170 | 32 | R | W | 0 | 1 | 54 |
| 171 | 5 | R | W | 0 | 1 | 55 |
| 172 | 17 | B | L | 1 | 0 | 55 |
| 173 | 36 | R | L | 2 | 0 | 55 |
| 174 | 35 | B | L | 3 | 0 | 55 |


| 175 | 34 | R | L | 4 | 0 |  | 55 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 176 | 20 | B | L | 5 | -32 | E | 23 |
| 177 | 4 | B | W | 0 | 1 |  | 24 |
| 178 | 11 | B | W | 0 | 1 |  | 25 |
| 179 | 13 | B | W | 0 | 1 |  | 26 |
| 180 | 12 | R | L | 1 | 0 |  | 26 |
| 181 | 16 | R | W | 0 | 1 |  | 27 |
| 182 | 31 | B | L | 1 | 0 |  | 27 |
| 183 | 31 | B | W | 0 | 1 |  | 28 |
| 184 | 27 | R | L | 1 | 0 |  | 28 |
| 185 | 7 | R | W | 0 | 1 |  | 29 |
| 186 | 12 | R | W | 0 | 1 |  | 30 |
| 187 | 29 | B | L | 1 | 0 |  | 30 |
| 188 | 5 | R | L | 2 | 0 |  | 30 |
| 189 | 8 | B | L | 3 | 0 |  | 30 |
| 190 | 31 | B | W | 0 | 1 |  | 31 |
| 191 | 00 | G | L | 1 | 0 |  | 31 |
| 192 | 4 | B | W | 0 | 1 |  | 32 |
| 193 | 22 | B | W | 0 | 1 |  | 33 |
| 194 | 0 | G | L | 1 | 0 |  | 33 |
| 195 | 16 | R | L | 2 | 0 |  | 33 |
| 196 | 2 | B | L | 3 | 0 |  | 33 |
| 197 | 13 | B | W | 0 | 1 |  | 34 |
| 198 | 24 | B | W | 0 | 1 |  | 35 |
| 199 | 1 | R | L | 1 | 0 |  | 35 |
| 200 | 21 | R | W | 0 | 1 |  | 36 |

We are always betting on the color that just came up. If the last decision is a Black, we bet on Black. If the last decision is a Red we bet on Red. If the last decision is Green (a zero), then we bet on the color that came up before the zero, or zeros. All this with a 5 step Martingale progression of 1, 2, 4, 8, 16 units.

In sequence 1, we come to the Roulette table and see that the last decision was a Red. We bet 1 unit on Red, we lose. We bet 2 units on Black, we lose. We bet 4 units on Red, we lose. We bet 8 units on Black we win. Our profit is 1 unit registered in the column Net Units.

We seem to be doing fine with this 5 step Martingale for 60 spins, having gained 30 unit profit, until suddenly we lose more than 5 times in a row, resulting a loss of 31 units (the table shows 32, let's just not forget to tip the croupier after winning 60 spins!). All our profit so far is lost in one run.

Say, we were patiently waiting for $5-6$ such zig-zags before we start betting. And after it happens in sequences $60-68$, we go for a 5 step Martingale. Then we limit the number of runs to say not more than 10. This will tremendously increase our chances to come out a winner, as we control our greed and do not play continuously until the Martingale fails, making us lose the hard earned 31 units, 1
unit at a time.
That means in sequence 84, we stop, having won 10 runs.
In sequence 176, we observe another failure of the 5 step Martingale. Fortunately we were not betting then. We start betting right after the failure is over, after the very first win. So we start betting on a repeat color in sequence 178. We play 10 runs, win 10 more units and we quit in sequence 193.

This system works pretty much OK, as long as you don't get caught in a series of zig-zags, particularly when they come back to back.

That's why we need a system that is better than a 5 step Martingale, so we can ensure a winning run even if it lasts more than 5 spins, even if we lose more than 5 times in a row.

In fact, the system we will witness now will always end with a run that wins, even if we have lost 8 or 10 times in a row. It will be enough to have wins that are equal to the number of losses plus 3 divided by 3 . The mathematical formula is:

$$
W=(L+3) / 3
$$

Where $\mathbf{W}$ is the number of wins and
$L$ is the number of losses.

In short, we will need to win a lot less times than losing in order to close the run. According to this formula, if we lose 12 times, we need to win only 5 times to close the run, as $5=(12+3) / 3$ or $15 / 3$.

If we lose 9 times, we only need to win 4 times to close the run. If we have 3 losses, we need to win only twice.

In other words, we now have the advantage. It is no longer 50-50 for Blacks or Reds. We need to win a lot less than we lose, to close the loop.

How de we achieve this?
We will see exactly how it works after the following simulation in Table 2. We will still be betting on the same color that just came up. The table will count the number of wins (column Count Wins) and the number of losses (column Count Losses). The moment the number of wins equals the number of losses plus 3 divided by 3 , it will indicate the end of the winning run. The system will always result in winning runs.

The column End of Run indicates the end of the winning run now, as opposed to Martingale's losing run.

Also, please note that winning the first bet is the end of the winning run and we start a new one.

We don't count the losing sessions, simply because there will be none. (Surprised? Just wait and see).

## Table 2:

| Seq \# | Number | Red / Black | W/L | Count Wins | Count <br> Losses | End of Run | Count Winning Sessions |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 10 | B |  | 0 | 0 |  | 0 |
| 2 | 6 | B | W | 1 | 0 | E | 1 |
| 3 | 33 | B | W | 1 | 0 | E | 2 |
| 4 | 31 | B | W | 1 | 0 | E | 3 |
| 5 | 24 | B | W | 1 | 0 | E | 4 |
| 6 | 5 | R | L | 0 | 1 |  | 4 |
| 7 | 27 | R | W | 1 | 1 |  | 4 |
| 8 | 32 | R | W | 2 | 1 | E | 5 |
| 9 | 4 | B | L | 0 | 1 |  | 5 |
| 10 | 17 | B | W | 1 | 1 |  | 5 |
| 11 | 0 | G | L | 1 | 2 |  | 5 |
| 12 | 29 | B | W | 2 | 2 | E | 6 |
| 13 | 36 | R | L | 0 | 1 |  | 6 |
| 14 | 19 | R | W | 1 | 1 |  | 6 |
| 15 | 26 | B | L | 1 | 2 |  | 6 |
| 16 | 31 | B | W | 2 | 2 | E | 7 |
| 17 | 00 | G | L | 0 | 1 |  | 7 |
| 18 | 22 | B | W | 1 | 1 |  | 7 |
| 19 | 10 | B | W | 2 | 1 | E | 8 |
| 20 | 7 | R | L | 0 | 1 |  | 8 |
| 21 | 0 | G | L | 0 | 2 |  | 8 |
| 22 | 34 | R | W | 1 | 2 |  | 8 |
| 23 | 9 | R | W | 2 | 2 | E | 9 |
| 24 | 13 | B | L | 0 | 1 |  | 9 |
| 25 | 2 | B | W | 1 | 1 |  | 9 |
| 26 | 7 | R | L | 1 | 2 |  | 9 |
| 27 | 4 | B | L | 1 | 3 |  | 9 |
| 28 | 26 | B | W | 2 | 3 | E | 10 |
| 29 | 31 | B | W | 1 | 0 | E | 11 |
| 30 | 16 | R | L | 0 | 1 |  | 11 |
| 31 | 31 | B | L | 0 | 2 |  | 11 |
| 32 | 18 | R | L | 0 | 3 |  | 11 |
| 33 | 9 | R | W | 1 | 3 |  | 11 |


| 34 | 28 | B | L | 1 | 4 |  | 11 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 35 | 31 | B | W | 2 | 4 |  | 11 |
| 36 | 27 | R | L | 2 | 5 |  | 11 |
| 37 | 32 | R | W | 3 | 5 | E | 12 |
| 38 | 32 | R | W | 1 | 0 | E | 13 |
| 39 | 00 | G | L | 0 | 1 |  | 13 |
| 40 | 8 | B | L | 0 | 2 |  | 13 |
| 41 | 6 | B | W | 1 | 2 |  | 13 |
| 42 | 17 | B | W | 2 | 2 | E | 14 |
| 43 | 30 | R | L | 0 | 1 |  | 14 |
| 44 | 33 | B | L | 0 | 2 |  | 14 |
| 45 | 6 | B | W | 1 | 2 |  | 14 |
| 46 | 27 | R | L | 1 | 3 |  | 14 |
| 47 | 8 | B | L | 1 | 4 |  | 14 |
| 48 | 16 | R | L | 1 | 5 |  | 14 |
| 49 | 4 | B | L | 1 | 6 |  | 14 |
| 50 | 20 | B | W | 2 | 6 |  | 14 |
| 51 | 00 | G | L | 2 | 7 |  | 14 |
| 52 | 21 | R | L | 2 | 8 |  | 14 |
| 53 | 27 | R | W | 3 | 8 |  | 14 |
| 54 | 17 | B | L | 3 | 9 |  | 14 |
| 55 | 36 | R | L | 3 | 10 |  | 14 |
| 56 | 7 | R | W | 4 | 10 |  | 14 |
| 57 | 29 | B | L | 4 | 11 |  | 14 |
| 58 | 18 | R | L | 4 | 12 |  | 14 |
| 59 | 32 | R | W | 5 | 12 | E | 15 |
| 60 | 25 | R | W | 1 | 0 | E | 16 |
| 61 | 26 | B | L | 0 | 1 |  | 16 |
| 62 | 18 | R | L | 0 | 2 |  | 16 |
| 63 | 00 | G | L | 0 | 3 |  | 16 |
| 64 | 1 | R | W | 1 | 3 |  | 16 |
| 65 | 9 | R | W | 2 | 3 | E | 17 |
| 66 | 24 | B | L | 0 | 1 |  | 17 |
| 67 | 5 | R | L | 0 | 2 |  | 17 |
| 68 | 17 | B | L | 0 | 3 |  | 17 |
| 69 | 6 | B | W | 1 | 3 |  | 17 |
| 70 | 00 | G | L | 1 | 4 |  | 17 |
| 71 | 9 | R | L | 1 | 5 |  | 17 |
| 72 | 3 | R | W | 2 | 5 |  | 17 |
| 73 | 16 | R | W | 3 | 5 | E | 18 |
| 74 | 6 | B | L | 0 | 1 |  | 18 |
| 75 | 8 | B | W | 1 | 1 |  | 18 |
| 76 | 19 | R | L | 1 | 2 |  | 18 |
| 77 | 21 | R | W | 2 | 2 | E | 19 |
| 78 | 29 | B | L | 0 | 1 |  | 19 |
| 79 | 20 | B | W | 1 | 1 |  | 19 |
| 80 | 23 | R | L | 1 | 2 |  | 19 |


| 81 | 23 | R | W | 2 | 2 | E | 20 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 82 | 31 | B | L | 0 | 1 |  | 20 |
| 83 | 22 | B | W | 1 | 1 |  | 20 |
| 84 | 7 | R | L | 1 | 2 |  | 20 |
| 85 | 14 | R | W | 2 | 2 | E | 21 |
| 86 | 19 | R | W | 1 | 0 | E | 22 |
| 87 | 12 | R | W | 1 | 0 | E | 23 |
| 88 | 00 | G | L | 0 | 1 |  | 23 |
| 89 | 33 | B | L | 0 | 2 |  | 23 |
| 90 | 20 | B | W | 1 | 2 |  | 23 |
| 91 | 14 | R | L | 1 | 3 |  | 23 |
| 92 | 34 | R | W | 2 | 3 | E | 24 |
| 93 | 22 | B | L | 0 | 1 |  | 24 |
| 94 | 3 | R | L | 0 | 2 |  | 24 |
| 95 | 1 | R | W | 1 | 2 |  | 24 |
| 96 | 7 | R | W | 2 | 2 | E | 25 |
| 97 | 20 | B | L | 0 | 1 |  | 25 |
| 98 | 35 | B | W | 1 | 1 |  | 25 |
| 99 | 19 | R | L | 1 | 2 |  | 25 |
| 100 | 00 | G | L | 1 | 3 |  | 25 |
| 101 | 28 | B | L | 1 | 4 |  | 25 |
| 102 | 26 | B | W | 2 | 4 |  | 25 |
| 103 | 31 | B | W | 3 | 4 | E | 26 |
| 104 | 29 | B | W | 1 | 0 | E | 27 |
| 105 | 25 | R | L | 0 | 1 |  | 27 |
| 106 | 8 | B | L | 0 | 2 |  | 27 |
| 107 | 34 | R | L | 0 | 3 |  | 27 |
| 108 | 36 | R | W | 1 | 3 |  | 27 |
| 109 | 34 | R | W | 2 | 3 | E | 28 |
| 110 | 27 | R | W | 1 | 0 | E | 29 |
| 111 | 18 | R | W | 1 | 0 | E | 30 |
| 112 | 22 | B | L | 0 | 1 |  | 30 |
| 113 | 36 | R | L | 0 | 2 |  | 30 |
| 114 | 27 | R | W | 1 | 2 |  | 30 |
| 115 | 00 | G | L | 1 | 3 |  | 30 |
| 116 | 13 | B | L | 1 | 4 |  | 30 |
| 117 | 0 | G | L | 1 | 5 |  | 30 |
| 118 | 19 | R | L | 1 | 6 |  | 30 |
| 119 | 15 | B | L | 1 | 7 |  | 30 |
| 120 | 18 | R | L | 1 | 8 |  | 30 |
| 121 | 16 | R | W | 2 | 8 |  | 30 |
| 122 | 2 | B | L | 2 | 9 |  | 30 |
| 123 | 4 | B | W | 3 | 9 |  | 30 |
| 124 | 26 | B | W | 4 | 9 | E | 31 |
| 125 | 00 | G | L | 0 | 1 |  | 31 |
| 126 | 36 | R | L | 0 | 2 |  | 31 |
| 127 | 18 | R | W | 1 | 2 |  | 31 |


| 128 | 20 | B | L | 1 | 3 |  | 31 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 129 | 8 | B | W | 2 | 3 | E | 32 |
| 130 | 36 | R | L | 0 | 1 |  | 32 |
| 131 | 34 | R | W | 1 | 1 |  | 32 |
| 132 | 9 | R | W | 2 | 1 | E | 33 |
| 133 | 1 | R | W | 1 | 0 | E | 34 |
| 134 | 28 | B | L | 0 | 1 |  | 34 |
| 135 | 00 | G | L | 0 | 2 |  | 34 |
| 136 | 32 | R | L | 0 | 3 |  | 34 |
| 137 | 34 | R | W | 1 | 3 |  | 34 |
| 138 | 0 | G | L | 1 | 4 |  | 34 |
| 139 | 30 | R | W | 2 | 4 |  | 34 |
| 140 | 22 | B | L | 2 | 5 |  | 34 |
| 141 | 12 | R | L | 2 | 6 |  | 34 |
| 142 | 2 | B | L | 2 | 7 |  | 34 |
| 143 | 19 | R | L | 2 | 8 |  | 34 |
| 144 | 27 | R | W | 3 | 8 |  | 34 |
| 145 | 23 | R | W | 4 | 8 | E | 35 |
| 146 | 0 | G | L | 0 | 1 |  | 35 |
| 147 | 18 | R | W | 1 | 1 |  | 35 |
| 148 | 29 | B | L | 1 | 2 |  | 35 |
| 149 | 16 | R | L | 1 | 3 |  | 35 |
| 150 | 00 | G | L | 1 | 4 |  | 35 |
| 151 | 6 | B | L | 1 | 5 |  | 35 |
| 152 | 21 | R | L | 1 | 6 |  | 35 |
| 153 | 00 | G | L | 1 | 7 |  | 35 |
| 154 | 25 | R | W | 2 | 7 |  | 35 |
| 155 | 27 | R | W | 3 | 7 |  | 35 |
| 156 | 1 | R | W | 4 | 7 | E | 36 |
| 157 | 21 | R | W | 1 | 0 | E | 37 |
| 158 | 36 | R | W | 1 | 0 | E | 38 |
| 159 | 5 | R | W | 1 | 0 | E | 39 |
| 160 | 1 | R | W | 1 | 0 | E | 40 |
| 161 | 17 | B | L | 0 | 1 |  | 40 |
| 162 | 9 | R | L | 0 | 2 |  | 40 |
| 163 | 34 | R | W | 1 | 2 |  | 40 |
| 164 | 12 | R | W | 2 | 2 | E | 41 |
| 165 | 11 | B | L | 0 | 1 |  | 41 |
| 166 | 17 | B | W | 1 | 1 |  | 41 |
| 167 | 31 | B | W | 2 | 1 | E | 42 |
| 168 | 7 | R | L | 0 | 1 |  | 42 |
| 169 | 26 | B | L | 0 | 2 |  | 42 |
| 170 | 17 | B | W | 1 | 2 |  | 42 |
| 171 | 3 | R | L | 1 | 3 |  | 42 |
| 172 | 9 | R | W | 2 | 3 | E | 43 |
| 173 | 0 | G | L | 0 | 1 |  | 43 |
| 174 | 15 | B | L | 0 | 2 |  | 43 |


| 175 | 32 | R | L | 0 | 3 |  | 43 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 176 | 18 | R | W | 1 | 3 |  | 43 |
| 177 | 12 | R | W | 2 | 3 | E | 44 |
| 178 | 27 | R | W | 1 | 0 | E | 45 |
| 179 | 5 | R | W | 1 | 0 | E | 46 |
| 180 | 28 | B | L | 0 | 1 |  | 46 |
| 181 | 17 | B | W | 1 | 1 |  | 46 |
| 182 | 32 | R | L | 1 | 2 |  | 46 |
| 183 | 35 | B | L | 1 | 3 |  | 46 |
| 184 | 17 | B | W | 2 | 3 | E | 47 |
| 185 | 35 | B | W | 1 | 0 | E | 48 |
| 186 | 25 | R | L | 0 | 1 |  | 48 |
| 187 | 23 | R | W | 1 | 1 |  | 48 |
| 188 | 35 | B | L | 1 | 2 |  | 48 |
| 189 | 13 | B | W | 2 | 2 | E | 49 |
| 190 | 21 | R | L | 0 | 1 |  | 49 |
| 191 | 7 | R | W | 1 | 1 |  | 49 |
| 192 | 6 | B | L | 1 | 2 |  | 49 |
| 193 | 23 | R | L | 1 | 3 |  | 49 |
| 194 | 32 | R | W | 2 | 3 | E | 50 |
| 195 | 35 | B | L | 0 | 1 |  | 50 |
| 196 | 14 | R | L | 0 | 2 |  | 50 |
| 197 | 21 | R | W | 1 | 2 |  | 50 |
| 198 | 00 | G | L | 1 | 3 |  | 50 |
| 199 | 7 | R | W | 2 | 3 | E | 51 |
| 200 | 24 | B | L | 0 | 1 |  | 51 |
| 201 | 8 | B | W | 1 | 1 |  | 51 |
| 202 | 0 | G | L | 1 | 2 |  | 51 |
| 203 | 1 | R | L | 1 | 3 |  | 51 |
| 204 | 0 | G | L | 1 | 4 |  | 51 |
| 205 | 8 | B | L | 1 | 5 |  | 51 |
| 206 | 24 | B | W | 2 | 5 |  | 51 |
| 207 | 14 | R | L | 2 | 6 |  | 51 |
| 208 | 6 | B | L | 2 | 7 |  | 51 |
| 209 | 0 | G | L | 2 | 8 |  | 51 |
| 210 | 3 | R | L | 2 | 9 |  | 51 |
| 211 | 34 | R | W | 3 | 9 |  | 51 |
| 212 | 34 | R | W | 4 | 9 | E | 52 |
| 213 | 10 | B | L | 0 | 1 |  | 52 |
| 214 | 7 | R | L | 0 | 2 |  | 52 |
| 215 | 12 | R | W | 1 | 2 |  | 52 |
| 216 | 17 | B | L | , | 3 |  | 52 |
| 217 | 8 | B | W | 2 | 3 | E | 53 |
| 218 | 6 | B | W | 1 | 0 | E | 54 |
| 219 | 23 | R | L | 0 | 1 |  | 54 |
| 220 | 00 | G | L | 0 | 2 |  | 54 |
| 221 | 17 | B | L | 0 | 3 |  | 54 |


| 222 | 20 | B | W | 1 | 3 |  | 54 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 223 | 16 | R | L | 1 | 4 |  | 54 |
| 224 | 22 | B | L | 1 | 5 |  | 54 |
| 225 | 1 | R | L | 1 | 6 |  | 54 |
| 226 | 19 | R | W | 2 | 6 |  | 54 |
| 227 | 26 | B | L | 2 | 7 |  | 54 |
| 228 | 36 | R | L | 2 | 8 |  | 54 |
| 229 | 7 | R | W | 3 | 8 |  | 54 |
| 230 | 33 | B | L | 3 | 9 |  | 54 |
| 231 | 33 | B | W | 4 | 9 | E | 55 |
| 232 | 32 | R | L | 0 | 1 |  | 55 |
| 233 | 33 | B | L | 0 | 2 |  | 55 |
| 234 | 23 | R | L | 0 | 3 |  | 55 |
| 235 | 19 | R | W | 1 | 3 |  | 55 |
| 236 | 29 | B | L | 1 | 4 |  | 55 |
| 237 | 26 | B | W | 2 | 4 |  | 55 |
| 238 | 16 | R | L | 2 | 5 |  | 55 |
| 239 | 0 | G | L | 2 | 6 |  | 55 |
| 240 | 19 | R | W | 3 | 6 | E | 56 |
| 241 | 22 | B | L | 0 | 1 |  | 56 |
| 242 | 4 | B | W | 1 | 1 |  | 56 |
| 243 | 8 | B | W | 2 | 1 | E | 57 |
| 244 | 35 | B | W | 1 | 0 | E | 58 |
| 245 | 14 | R | L | 0 | 1 |  | 58 |
| 246 | 34 | R | W | 1 | 1 |  | 58 |
| 247 | 13 | B | L | 1 | 2 |  | 58 |
| 248 | 20 | B | W | 2 | 2 | E | 59 |
| 249 | 4 | B | W | 1 | 0 | E | 60 |
| 250 | 30 | R | L | 0 | 1 |  | 60 |
| 251 | 1 | R | W | 1 | 1 |  | 60 |
| 252 | 20 | B | L | 1 | 2 |  | 60 |
| 253 | 18 | R | L | 1 | 3 |  | 60 |
| 254 | 8 | B | L | 1 | 4 |  | 60 |
| 255 | 28 | B | W | 2 | 4 |  | 60 |
| 256 | 17 | B | W | 3 | 4 | E | 61 |
| 257 | 26 | B | W | 1 | 0 | E | 62 |
| 258 | 10 | B | W | 1 | 0 | E | 63 |
| 259 | 3 | R | L | 0 | 1 |  | 63 |
| 260 | 12 | R | W | 1 | 1 |  | 63 |
| 261 | 32 | R | W | 2 | 1 | E | 64 |
| 262 | 0 | G | L | 0 | 1 |  | 64 |
| 263 | 9 | R | W | 1 | 1 |  | 64 |
| 264 | 24 | B | L | 1 | 2 |  | 64 |
| 265 | 24 | B | W | 2 | 2 | E | 65 |
| 266 | 17 | B | W | 1 | 0 | E | 66 |
| 267 | 21 | R | L | 0 | 1 |  | 66 |
| 268 | 9 | R | W | 1 | 1 |  | 66 |


| 269 | 29 | B | L | 1 | 2 |  | 66 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 270 | 26 | B | W | 2 | 2 | E | 67 |
| 271 | 21 | R | L | 0 | 1 |  | 67 |
| 272 | 26 | B | L | 0 | 2 |  | 67 |
| 273 | 17 | B | W | 1 | 2 |  | 67 |
| 274 | 13 | B | W | 2 | 2 | E | 68 |
| 275 | 31 | B | W | 1 | 0 | E | 69 |
| 276 | 1 | R | L | 0 | 1 |  | 69 |
| 277 | 5 | R | W | 1 | 1 |  | 69 |
| 278 | 18 | R | W | 2 | 1 | E | 70 |
| 279 | 30 | R | W | 1 | 0 | E | 71 |
| 280 | 34 | R | W | 1 | 0 | E | 72 |
| 281 | 27 | R | W | 1 | 0 | E | 73 |
| 282 | 14 | R | W | 1 | 0 | E | 74 |
| 283 | 30 | R | W | 1 | 0 | E | 75 |
| 284 | 22 | B | L | 0 | 1 |  | 75 |
| 285 | 4 | B | W | 1 | 1 |  | 75 |
| 286 | 34 | R | L | 1 | 2 |  | 75 |
| 287 | 6 | B | L | 1 | 3 |  | 75 |
| 288 | 6 | B | W | 2 | 3 | E | 76 |
| 289 | 1 | R | L | 0 | 1 |  | 76 |
| 290 | 20 | B | L | 0 | 2 |  | 76 |
| 291 | 7 | R | L | 0 | 3 |  | 76 |
| 292 | 7 | R | W | 1 | 3 |  | 76 |
| 293 | 9 | R | W | 2 | 3 | E | 77 |
| 294 | 32 | R | W | 1 | 0 | E | 78 |
| 295 | 00 | G | L | 0 | 1 |  | 78 |
| 296 | 14 | R | W | 1 | 1 |  | 78 |
| 297 | 31 | B | L | 1 | 2 |  | 78 |
| 298 | 16 | R | L | 1 | 3 |  | 78 |
| 299 | 10 | B | L | 1 | 4 |  | 78 |
| 300 | 14 | R | L | 1 | 5 |  | 78 |
| 301 | 10 | B | L | 1 | 6 |  | 78 |
| 302 | 15 | B | W | 2 | 6 |  | 78 |
| 303 | 31 | B | W | 3 | 6 | E | 79 |
| 304 | 30 | R | L | 0 | 1 |  | 79 |
| 305 | 0 | G | L | 0 | 2 |  | 79 |
| 306 | 29 | B | L | 0 | 3 |  | 79 |
| 307 | 2 | B | W | 1 | 3 |  | 79 |
| 308 | 13 | B | W | 2 | 3 | E | 80 |
| 309 | 19 | R | L | 0 | 1 |  | 80 |
| 310 | 16 | R | W | 1 | 1 |  | 80 |
| 311 | 4 | B | L | 1 | 2 |  | 80 |
| 312 | 3 | R | L | 1 | 3 |  | 80 |
| 313 | 20 | B | L | 1 | 4 |  | 80 |
| 314 | 18 | R | L | 1 | 5 |  | 80 |
| 315 | 9 | R | W | 2 | 5 |  | 80 |


| 316 | 2 | B | L | 2 | 6 |  | 80 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 317 | 11 | B | W | 3 | 6 | E | 81 |
| 318 | 20 | B | W | 1 | 0 | E | 82 |
| 319 | 13 | B | W | 1 | 0 | E | 83 |
| 320 | 14 | R | L | 0 | 1 |  | 83 |
| 321 | 11 | B | L | 0 | 2 |  | 83 |
| 322 | 6 | B | W | 1 | 2 |  | 83 |
| 323 | 12 | R | L | 1 | 3 |  | 83 |
| 324 | 18 | R | W | 2 | 3 | E | 84 |
| 325 | 1 | R | W | 1 | 0 | E | 85 |
| 326 | 35 | B | L | 0 | 1 |  | 85 |
| 327 | 2 | B | W | 1 | 1 |  | 85 |
| 328 | 9 | R | L | 1 | 2 |  | 85 |
| 329 | 34 | R | W | 2 | 2 | E | 86 |
| 330 | 31 | B | L | 0 | 1 |  | 86 |
| 331 | 20 | B | W | 1 | 1 |  | 86 |
| 332 | 23 | R | L | 1 | 2 |  | 86 |
| 333 | 10 | B | L | 1 | 3 |  | 86 |
| 334 | 24 | B | W | 2 | 3 | E | 87 |
| 335 | 35 | B | W | 1 | 0 | E | 88 |
| 336 | 21 | R | L | 0 | 1 |  | 88 |
| 337 | 31 | B | L | 0 | 2 |  | 88 |
| 338 | 20 | B | W | 1 | 2 |  | 88 |
| 339 | 5 | R | L | 1 | 3 |  | 88 |
| 340 | 22 | B | L | 1 | 4 |  | 88 |
| 341 | 16 | R | L | 1 | 5 |  | 88 |
| 342 | 19 | R | W | 2 | 5 |  | 88 |
| 343 | 32 | R | W | 3 | 5 | E | 89 |
| 344 | 6 | B | L | 0 | 1 |  | 89 |
| 345 | 20 | B | W | 1 | 1 |  | 89 |
| 346 | 00 | G | L | 1 | 2 |  | 89 |
| 347 | 10 | B | W | 2 | 2 | E | 90 |
| 348 | 32 | R | L | 0 | 1 |  | 90 |
| 349 | 4 | B | L | 0 | 2 |  | 90 |
| 350 | 35 | B | W | 1 | 2 |  | 90 |
| 351 | 7 | R | L | 1 | 3 |  | 90 |
| 352 | 5 | R | W | 2 | 3 | E | 91 |
| 353 | 0 | G | L | 0 | 1 |  | 91 |
| 354 | 10 | B | L | 0 | 2 |  | 91 |
| 355 | 12 | R | L | 0 | 3 |  | 91 |
| 356 | 29 | B | L | 0 | 4 |  | 91 |
| 357 | 6 | B | W | 1 | 4 |  | 91 |
| 358 | 18 | R | L | 1 | 5 |  | 91 |
| 359 | 30 | R | W | 2 | 5 |  | 91 |
| 360 | 8 | B | L | 2 | 6 |  | 91 |
| 361 | 8 | B | W | 3 | 6 | E | 92 |
| 362 | 25 | R | L | 0 | 1 |  | 92 |


| 363 | 31 | B | L | 0 | 2 |  | 92 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 364 | 2 | B | W | 1 | 2 |  | 92 |
| 365 | 4 | B | W | 2 | 2 | E | 93 |
| 366 | 7 | R | L | 0 | 1 |  | 93 |
| 367 | 11 | B | L | 0 | 2 |  | 93 |
| 368 | 8 | B | W | 1 | 2 |  | 93 |
| 369 | 4 | B | W | 2 | 2 | E | 94 |
| 370 | 18 | R | L | 0 | 1 |  | 94 |
| 371 | 2 | B | L | 0 | 2 |  | 94 |
| 372 | 17 | B | W | 1 | 2 |  | 94 |
| 373 | 10 | B | W | 2 | 2 | E | 95 |
| 374 | 28 | B | W | 1 | 0 | E | 96 |
| 375 | 19 | R | L | 0 | 1 |  | 96 |
| 376 | 36 | R | W | 1 | 1 |  | 96 |
| 377 | 23 | R | W | 2 | 1 | E | 97 |
| 378 | 18 | R | W | 1 | 0 | E | 98 |
| 379 | 20 | B | L | 0 | 1 |  | 98 |
| 380 | 2 | B | W | 1 | 1 |  | 98 |
| 381 | 6 | B | W | 2 | 1 | E | 99 |
| 382 | 10 | B | W | 1 | 0 | E | 100 |
| 383 | 24 | B | W | 1 | 0 | E | 101 |
| 384 | 8 | B | W | 1 | 0 | E | 102 |
| 385 | 4 | B | W | 1 | 0 | E | 103 |
| 386 | 13 | B | W | 1 | 0 | E | 104 |
| 387 | 7 | R | L | 0 | 1 |  | 104 |
| 388 | 7 | R | W | 1 | 1 |  | 104 |
| 389 | 00 | G | L | 1 | 2 |  | 104 |
| 390 | 7 | R | W | 2 | 2 | E | 105 |
| 391 | 10 | B | L | 0 | 1 |  | 105 |
| 392 | 11 | B | W | 1 | 1 |  | 105 |
| 393 | 0 | G | L | 1 | 2 |  | 105 |
| 394 | 20 | B | W | 2 | 2 | E | 106 |
| 395 | 8 | B | W | 1 | 0 | E | 107 |
| 396 | 25 | R | L | 0 | 1 |  | 107 |
| 397 | 14 | R | W | 1 | 1 |  | 107 |
| 398 | 15 | B | L | 1 | 2 |  | 107 |
| 399 | 31 | B | W | 2 | 2 | E | 108 |
| 400 | 19 | R | L | 0 | 1 |  | 108 |
| 401 | 26 | B | L | 0 | 2 |  | 108 |
| 402 | 2 | B | W | 1 | 2 |  | 108 |
| 403 | 15 | B | W | 2 | 2 | E | 109 |
| 404 | 14 | R | L | 0 | 1 |  | 109 |
| 405 | 4 | B | L | 0 | 2 |  | 109 |
| 406 | 15 | B | W | 1 | 2 |  | 109 |
| 407 | 14 | R | L | 1 | 3 |  | 109 |
| 408 | 2 | B | L | 1 | 4 |  | 109 |
| 409 | 7 | R | L | 1 | 5 |  | 109 |


| 410 | 13 | B | L | 1 | 6 |  | 109 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 411 | 29 | B | W | 2 | 6 |  | 109 |
| 412 | 18 | R | L | 2 | 7 |  | 109 |
| 413 | 13 | B | L | 2 | 8 |  | 109 |
| 414 | 31 | B | W | 3 | 8 |  | 109 |
| 415 | 30 | R | L | 3 | 9 |  | 109 |
| 416 | 9 | R | W | 4 | 9 | E | 110 |
| 417 | 18 | R | W | 1 | 0 | E | 111 |
| 418 | 15 | B | L | 0 | 1 |  | 111 |
| 419 | 19 | R | L | 0 | 2 |  | 111 |
| 420 | 10 | B | L | 0 | 3 |  | 111 |
| 421 | 22 | B | W | 1 | 3 |  | 111 |
| 422 | 17 | B | W | 2 | 3 | E | 112 |
| 423 | 34 | R | L | 0 | 1 |  | 112 |
| 424 | 36 | R | W | 1 | 1 |  | 112 |
| 425 | 5 | R | W | 2 | 1 | E | 113 |
| 426 | 18 | R | W | 1 | 0 | E | 114 |
| 427 | 13 | B | L | 0 | 1 |  | 114 |
| 428 | 23 | R | L | 0 | 2 |  | 114 |
| 429 | 18 | R | W | 1 | 2 |  | 114 |
| 430 | 1 | R | W | 2 | 2 | E | 115 |
| 431 | 24 | B | L | 0 | 1 |  | 115 |
| 432 | 19 | R | L | 0 | 2 |  | 115 |
| 433 | 11 | B | L | 0 | 3 |  | 115 |
| 434 | 35 | B | W | 1 | 3 |  | 115 |
| 435 | 35 | B | W | 2 | 3 | E | 116 |
| 436 | 29 | B | W | 1 | 0 | E | 117 |
| 437 | 3 | R | L | 0 | 1 |  | 117 |
| 438 | 22 | B | L | 0 | 2 |  | 117 |
| 439 | 28 | B | W | 1 | 2 |  | 117 |
| 440 | 7 | R | L | 1 | 3 |  | 117 |
| 441 | 22 | B | L | 1 | 4 |  | 117 |
| 442 | 23 | R | L | 1 | 5 |  | 117 |
| 443 | 29 | B | L | 1 | 6 |  | 117 |
| 444 | 19 | R | L | 1 | 7 |  | 117 |
| 445 | 21 | R | W | 2 | 7 |  | 117 |
| 446 | 7 | R | W | 3 | 7 |  | 117 |
| 447 | 13 | B | L | 3 | 8 |  | 117 |
| 448 | 7 | R | L | 3 | 9 |  | 117 |
| 449 | 28 | B | L | 3 | 10 |  | 117 |
| 450 | 25 | R | L | 3 | 11 |  | 117 |
| 451 | 32 | R | W | 4 | 11 |  | 117 |
| 452 | 36 | R | W | 5 | 11 | E | 118 |
| 453 | 16 | R | W | 1 | 0 | E | 119 |
| 454 | 16 | R | W | 1 | 0 | E | 120 |
| 455 | 35 | B | L | 0 | 1 |  | 120 |
| 456 | 20 | B | W | 1 | 1 |  | 120 |


| 457 | 5 | R | L | 1 | 2 |  | 120 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 458 | 29 | B | L | 1 | 3 |  | 120 |
| 459 | 7 | R | L | 1 | 4 |  | 120 |
| 460 | 35 | B | L | 1 | 5 |  | 120 |
| 461 | 20 | B | W | 2 | 5 |  | 120 |
| 462 | 26 | B | W | 3 | 5 | E | 121 |
| 463 | 16 | R | L | 0 | 1 |  | 121 |
| 464 | 7 | R | W | 1 | 1 |  | 121 |
| 465 | 28 | B | L | 1 | 2 |  | 121 |
| 466 | 1 | R | L | 1 | 3 |  | 121 |
| 467 | 28 | B | L | 1 | 4 |  | 121 |
| 468 | 7 | R | L | 1 | 5 |  | 121 |
| 469 | 11 | B | L | 1 | 6 |  | 121 |
| 470 | 6 | B | W | 2 | 6 |  | 121 |
| 471 | 11 | B | W | 3 | 6 | E | 122 |
| 472 | 00 | G | L | 0 | 1 |  | 122 |
| 473 | 2 | B | W | 1 | 1 |  | 122 |
| 474 | 27 | R | L | 1 | 2 |  | 122 |
| 475 | 21 | R | W | 2 | 2 | E | 123 |
| 476 | 26 | B | L | 0 | 1 |  | 123 |
| 477 | 26 | B | W | 1 | 1 |  | 123 |
| 478 | 33 | B | W | 2 | 1 | E | 124 |
| 479 | 33 | B | W | 1 | 0 | E | 125 |
| 480 | 3 | R | L | 0 | 1 |  | 125 |
| 481 | 2 | B | L | 0 | 2 |  | 125 |
| 482 | 22 | B | W | 1 | 2 |  | 125 |
| 483 | 10 | B | W | 2 | 2 | E | 126 |
| 484 | 9 | R | L | 0 | 1 |  | 126 |
| 485 | 29 | B | L | 0 | 2 |  | 126 |
| 486 | 27 | R | L | 0 | 3 |  | 126 |
| 487 | 29 | B | L | 0 | 4 |  | 126 |
| 488 | 17 | B | W | 1 | 4 |  | 126 |
| 489 | 19 | R | L | 1 | 5 |  | 126 |
| 490 | 2 | B | L | 1 | 6 |  | 126 |
| 491 | 7 | R | L | 1 | 7 |  | 126 |
| 492 | 7 | R | W | 2 | 7 |  | 126 |
| 493 | 32 | R | W | 3 | 7 |  | 126 |
| 494 | 26 | B | L | 3 | 8 |  | 126 |
| 495 | 9 | R | L | 3 | 9 |  | 126 |
| 496 | 25 | R | W | 4 | 9 | E | 127 |
| 497 | 17 | B | L | 0 | 1 |  | 127 |
| 498 | 36 | R | L | 0 | 2 |  | 127 |
| 499 | 32 | R | W | 1 | 2 |  | 127 |

So, we played for almost 500 spins and we had no losing runs. And we thought Roulette was unbeatable. What's going on here? Have we discovered something new, or is there any catch? And we still don't know how the system
works and what makes it work. But, patience, by the end of the document everything will be crystal clear, as we will see many examples referring to the simulation in Table 2.

The trick for this system to work as well as it does, is that when we lose, we go one step backwards, and when we win we go 3 steps ahead. This is why the formula $W=(L+3) / 3$ is active. Since it's on this page, look at sequences 484 to 496. The run goes for 13 spins, we lose 9 times and we win 4 and the winning run ends.

I think we waited enough and we deserve an explanation on how and why this system works consistently and never fails.

Please note first that if we were playing the 5 step Martingale, observe that in sequence 115 we lose 6 times in a row, which would result in a 31 unit loss. The same can be said about sequence 148, where Martingale fails again. And in sequences 297, 440, 465, Martingale fails. Failing Martingale 5 times results in -153 units. But in this system such failures never happen. We keep our 127 gained units.

## Explanation

I think I kept you enough in suspense, before I reveal this wonderful system. You will find it simple to use after you get the feel of it. It's important to understand it well and practice it with simulated runs.

Referring to Table 2 above, you come to the Roulette table, you see the last decision is a Black, you bet 3 units on Black. Black comes you win, this ends the run. You profit 3 units at every run.
You keep betting on Black again. It wins 4 times in a row. You already have a 12 unit profit.
In sequence 6 a Red shows up, we lose our bet. We write down the 3 units we lose on a betting chart.
In sequence 7, we bet 3 units again on Red (the last decision). Red comes up and we win, but we are even.
In sequence 8, we bet 3 units again on Red. We win. We profit 3 units. This ends this run.

Those were the simple cases.
Let's take a more complex run, that starts in sequence 30 in Table 2, right after the previous run is ended in Sequence 29. This time we'll create a little scheme that will track what we write down and how we bet.

|  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Seq \# | Number | Red $/$ <br> Black | W/L | Count <br> Wins | Count <br> Cosses | End of <br> Run | Winning <br> Sessions |
| 29 | $\mathbf{3 1}$ | B | W | 1 | 0 | E | 11 |
| 30 | 16 | R | L | 0 | 1 |  | 11 |
| 31 | $\mathbf{3 1}$ | B | L | 0 | 2 |  | 11 |
| 32 | 18 | R | L | 0 | 3 |  | 11 |
| 33 | 9 | R | W | 1 | 3 |  | 11 |
| 34 | $\mathbf{2 8}$ | B | L | 1 | 4 |  | 11 |
| 35 | $\mathbf{3 1}$ | B | W | 2 | 4 |  | 11 |
| 36 | $\mathbf{2 7}$ | R | L | 2 | 5 |  | 11 |
| 37 | 32 | R | W | 3 | 5 | E | 12 |

The first thing we always do, we write down the 3 units we are about to bet. In sequence 30, we bet 3 units on Black. We lose. We write down the 3 next to the 3 we had written down.
In sequence 31, we bet 3 units on Red. We lose again. We write down another 3 next to the previous one.
We will be betting those 3 units consistently until we have a first win.
In sequence 32, we bet 3 units on Black. We lose again. We write down another 3 next to the previous three 3's.
In sequence 33, we bet 3 units on Red. This time we win. We cross out the first 3 we have written down. We do this (cross out 1 number) only after the first win. That leaves us with another three 3's.
After the first win, we start betting on the sum of the 3 numbers we have written down. In our case we have three 3's, so we bet 9 chips on Red in sequence 34 and we lose. We write down the 9 that we lost next to the numbers we have written down so far. We should have so far written three 3 's and one 9 .

So, from now on, that is after we had the first win, the rule is that we write down the number of chips we lose next to all the numbers we have written and we always bet on the sum of the three numbers after our first win.

In sequence 34, we bet 9 chips (the sum of the first three 3's written down) on Red. We lose. We write down the 9 we lost next to the number sequence. We should have three 3 's and two 9 's written down.

In sequence 35, we bet 9 chips (the sum of the first three 3's written down) on Black following the last decision. We win. This is the second win. This time we cross out all 3 numbers that we have bet on, that gave the sum of 9 . We are left with the two 9 's that were written down.

Since we don't have 3 numbers written down, we bet on only the sum of the two 9 's, that is 18 chips on Black in sequence 36. Red comes up. We lose. We write down the lost 18 next to the two 9 's.

Our next bet will be the sum of the three numbers written down, that is $9+9+18$ or 36 chips on the last decision, that is on Red. Red comes up, we win, we cross out all 3 numbers that we have bet on. That ends this run and we profit 3 units.

As you can see, every win takes us 3 steps ahead towards our goal of winning the run and every loss is only 1 step backwards. The run ends when there are no more numbers written down, when they are all crossed out.

Let's take another case, one of the worst case scenarios, that of sequences 200-212 in Table 2, where it takes 12 spins to end the run.

| Seq \# | Number | Red / Black | W/L | Count Wins | Count Losses | End of Run |  | Tracking Mechanism |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 199 | 7 | R | W | 2 | 3 | E | Bet | Scheme |
| 200 | 24 | B | L | 0 | 1 |  | 3 | 33 |
| 201 | 8 | B | W | 1 | 1 |  | 3 | 33 |
| 202 | 0 | G | L | 1 | 2 |  | 3 | 33 |
| 203 | 1 | R | L | 1 | 3 |  | 6 | 336 |
| 204 | 0 | G | L | 1 | 4 |  | 12 | 33612 |
| 205 | 8 | B | L | 1 | 5 |  | 12 | 3361212 |
| 206 | 24 | B | W | 2 | 5 |  | 12 | 3361212 |
| 207 | 14 | R | L | 2 | 6 |  | 24 | 121224 |
| 208 | 6 | B | L | 2 | 7 |  | 48 | 12122448 |
| 209 | 0 | G | L | 2 | 8 |  | 48 | 1212244848 |
| 210 | 3 | R | L | 2 | 9 |  | 48 | 121224484848 |
| 211 | 34 | R | W | 3 | 9 |  | 48 | 121224484848 |
| 212 | 34 | R | W | 4 | 9 | E | 144 | 484848 |

After a run is finished in sequence 199, we start a new run in sequence 200. First we write down the 3 units as indicated in Scheme column.
We lose our first bet in sequence 200, so we write down another 3 next to the first 3.
We bet 3 chips again on Black in sequence 201. We win. This is the first win, thus this eliminates the first 3 only and we cross it out.
After our first win, we bet the sum of up to three numbers written down. We only have one 3, so bet 3 chips.
We bet on Black. A zero comes up, we lose. We write down the 3 that we lost. We bet on Black again for the sum of the two 3's, that is 6 chips, since we have only 2 numbers. Red comes up. We lose. We write down the 6 that we lost. Now the sum of three numbers written down is $12(3+3+6)$. We bet 12 chips on our next bet, we lose, we write down the 12 that we lost and so on.

When we win, we cross out the first three numbers and then bet on the sum of
the first three numbers that are left on the scheme.
Since we are betting on the sum of the first three numbers and we cross them out every time we win, we advance three times faster towards our 3 unit profit destination. That's why this system hardly fails, as even money bets chances are almost 50-50 for wins and losses, but when we win we are ahead three times more than just once.

Another advantage of this system is that every time we lose, we don't have to double up from one loss to another. As a matter of fact, we could lose 12-15 times in a row and all we need to wager is the sum of the first three numbers that are the same, if no win occurs in between.

In the case that we lose 15 times in a row, we need to win only $(15+3) / 3=6$ times to end the run, because winning 6 times will eliminate 16 numbers (the first win, only 1 and all the other wins, 3 numbers).

So, no need to be afraid of losing streaks, as the betting amount doesn't change from one loss to another. We could have a 7 zig-zag pattern, that changes later into a streak of repeating colors and we would end the run successfully.

Now, this system postpones the reaching of the table limit tremendously, unlike a Martingale that takes not more than 7-8 losses to reach the table maximum bet limit. If you ever encounter a situation where you need to bet a large sum, it is possible to split your bet into smaller sums, such as one third of them, by simply writing those numbers down next to the previous ones.

For instance, if you need to wager 144 chips and you are reluctant to do so, then split your bet into two numbers of 72 chips, or into 3 numbers of 48 chips, by writing them down and bet on the sum of the first three numbers. This will extend a bit the time of the end of the run, but will avoid reaching the table's maximum limit.

So, when the bets get high, you simply divide them in smaller portions.
Supposing on your betting scheme you have 333666999121212484848
You bet 9 you win, now you have 666999121212484848
You win 3 more bets and now you have 4848 48. This requires a 144 unit bet.
Instead of placing 144 units on the table, write 188 times, so 144 will become 18 18181818181818

So your next bet becomes only 54 units instead of 144 . Yes, you need to win 3 more bets, but with IBS advantage of needing to win $26 \%$ when you are winning
$49 \%$ on all Player bets, it's a piece of cake. Also, you never exceed table limits this way.

You can of course further divide all the 18's into three 6's and the 6's into three 2 's to reduce your bets as much as possible until you reach the level with which you feel comfortable. Every split will extend the time the run will be resolved with a win, but it will come to a resolution.

Another suggestion I can have for you using the split bet technique, is that when you reach a stage that you have to place a high amount, simply split it into multiple sessions with a certain win target.

What I mean is the following: Supposing you need to bet a 48 unit bet and this is what you have in your betting scheme and you don't feel comfortable with that amount, then you can simply divide this into 6 sessions of 8 unit or 8 sessions of 6 unit targets.

What do we mean with target? When you apply REWARD, your initial target is to win that 1 unit or 3 units as documented. This is usually accomplished within 1 to 15 bets. Let's say that this was not accomplished in 15 bets and you reached a stage that you have to bet 48 units. Then simply start 6 new sessions with an 8 unit win target. Since $95 \%$ of the runs are won easily, you would be winning those 6 sessions without risking to bet high amounts. This works very well.

