Worldwide Casino Consulting Inc.

Card Count Exercises
George Joseph

The first step in the study of card counting is the recognition of those groups of cards known as "Plus", "Minus" & "Zero". It is important to understand that the House has one major advantage over the players, "We Hit Last". "They Go First". The customer must act upon their hand before the dealer. If the player "Busts", the house takes that player's wager without ever taking a chance. There is no "Double Bust" in the game of Blackjack. Double Bust means that the player and dealer cannot both bust on the same wager…the player's wager is lost first…uncontested. Approximately 30% of all player wagers will be settled in this fashion…the house takes the player's bet without ever taking a chance.

This fundamental rule of Blackjack gives the house an advantage over the player calculated at approximately 7.0%. A seven percent rate of win is far too great an advantage and the players would soon lose interest as they would lose too quickly.

In order to level the playing field, and keep the customers playing, the house concedes the following rules to all customers;

1. House Pays 3 to 2 on Player Blackjacks
2. The House allows the player to Double Down
3. The House allows the player to Double on Soft Hands
4. The House allows the player to Split Pairs
5. The House allows the player to Double After a Split
6. The House offers the player Insurance against a dealer Blackjack
7. The House may offer the player a Surrender Option

The above rules have two things in common. Number one, they are all rules the customer can take advantage of…but the house cannot. Number two, all of the above rules involve money, and when negotiated properly can significantly reduce the House Advantage. One additional rule needs to be mentioned. Many casinos Hit Soft 17. Consider that the average winning total in Blackjack is 18.3…Then Hitting Soft 17 favors the House by approximately 0.25% or less, dependent on the number of decks in play. House Rules are fixed, meaning the dealer has no decision to make. His game is "strategically static", fancy words which mean the dealer has no choice…the dealer is not, (nor never can) gambling during play. By comparison a player is free to exercise their own decision and negotiate the above rules at their will.

For this cursory look at Card Counting, the assumption has to be made that a player follows Perfect Basic Strategy…deviations will be addressed later.

Because the house hits last, the dealer will win more hands than they lose. The house wins on average 48.0% of the hands, Loses approximately 43.0% of the hands and Ties about 9.0%. This is just the opposite for the player. Although a good basic strategy player or card counter will lose more hands than they win, the money rules, correctly played allow the player to significantly reduce the house's advantage and/or "Book a Winner".

NOTE: It should be stated early on, that Card Counting is not George Joseph's opinion or The Wizard of Odds opinion…It is what it is!.   The method of play is known as dependent trail. Cards are shuffled and then several rounds are dealt before the next shuffle-up…so what happens during successive rounds of play can give information as to what might happen in future rounds. Keep in mind, a card counter does not create the advantage, he simply recognizes it in play. Any other player on that game at that time or walking into that game enjoys the same advantage over the house…they just don't know it. The rules of the game and the method of play create an opportunity for card counting to be effective.

Whenever the rules of play for any game are lopsided, as are the rules of Blackjack, then the cards are also lopsided. High value cards are more beneficial to the players as they produce more Blackjacks and better Double Down possibilities. The high cards also cause the dealer to go over 21 more often. In simple terms, it is a Negative thing or a Minus for a player when **extra** High Cards leave the game. Conversely, Low value cards favor the house when they are in play, as they do not produce as many Blackjacks or good Double Down cards. Low value cards also help the dealer make a total of between 17 and 21 more often. In simple terms, it is a Positive thing or a Plus for a player when **extra** Low Cards leave the game…(Means extra High Cards are in Play)

The group values of playing cards for Blackjack is as follows;

LOW CARDS	ZERO CARDS	HIGH CARDS
2 3 4 5 6	7 8 9	10 Jack Queen King Ace

You'll notice there are five Low Value cards and five High Value cards…meaning the ratio of high cards to low cards is equal or balanced.

The 7's, 8's, & 9's are designated as Zero cards for a standard level one card count. In more advanced counts where each card value has a more exact mathematical strength, the 7's would be placed with the low cards and the 9's with the high cards. The 8 has no weight and is essential neutral.

The first exercise in the identification of card counters is to quickly become familiar with the card groups…PLUS – Zero - MINUS.

Begin by laying a blank piece of paper longwise on the table.

Write the following headings;

PLUS	ZERO	MINUS
2,3,4,5,6	7,8,9	10,J,Q,K,Ace
"+"	"0"	"-"

EXERCISE # 1…

Shuffle a single deck.
Deal the cards face-up one at a time into "Plus" "Zero" "Minus" piles.
Your goal is to accurately complete this exercise in 45 seconds or less
Check each pile for accuracy

The first exercise attempts to acquaint you visually with the Plus, Zero and Minus card groups. You should begin to see each card not at its' face value, but at its' group value.

Exercise number two will attempt to reinforce the group values not only visually, buy verbally as well.

EXERCISE # 2…

Shuffle a single deck.
Deal the cards face-up one at a time into "Plus" "Zero" "Minus" piles…but this time Call Out…"PLUS" "ZERO" or "MINUS" as you place the cards down
Your goal is to accurately complete this exercise in 45 seconds or less
Check each pile for accuracy

You'll probably notice exercise number two is much more difficult than exercise number one. The reason is that the group values and the card values are counter intuitive. When you see a low value card (2,3,4,5,6) you unconsciously think low or small…which is negative. Conversely, when you see high value cards (10, Jack, Queen, King or Ace) you unconsciously think high or big...which is positive. Unconsciously, just the opposite of card count groups. Keep in mind that the reason 2,3,4,5,6 are in a Plus or Positive group is that when they leave the game it is a Plus or Positive for the player. Conversely, the reason 10, Jack, Queen, King, Ace are in a negative group is that when they leave the game it is a Minus or Negative for the player.

HELPFUL HINT:

Whenever I administer Exercise Two, I suggest working with a partner…One person conducts the exercise, while the other observers. The observer is listening and watching for the trainee to put the card in the appropriate pile, but say the wrong word. Because card counting is counter intuitive it is very common for beginning trainees to see a Face Card…Place it in the correct "Negative" Pile…but say "Plus". (The mind thinks of Big cards as Plus) Conversely, it is very common for beginning trainees to see a Baby (small card)…Place it in the correct "Plus" Pile…but say "Minus". (The mind thinks of small cards as Minus)

Exercise number three will allow you to assign a value to each card count group…
Visually – Verbally – Numerically.

EXERCISE # 3…

Shuffle a single deck.
Deal the cards face-up one at a time into "Plus" "Zero" "Minus" piles…but this time Call
Out…"PLUS ONE" "ZERO" or "MINUS ONE" as you place the cards down.
Your goal is to accurately complete this exercise in 45 seconds or less
Check each pile for accuracy

Exercise number three is important because you are actually assigning a group numeric value
to each playing card rather than its' actual face value. This exercise also prepares you for the actual
card count process known as the Running Count.

EXERCISE # 4…THE "RUNNING COUNT"

Shuffle a single deck.
Deal one card at a time
Start at "Zero"
Add "Plus 1" for each 2,3,4,5,6 seen
Subtract "Minus 1" for each 10, J,Q,K,Ace seen
–10-9-8-7-6-5-4-3-2-1 0 +1+2+3+4+5+6+7+8+9+10

You can check your accuracy because you start with "Zero" and must end with
"Zero"…there is an equal number of Plus & Minus cards…20 Plus cards and 20 Minus cards per
deck….12 Zero cards per deck.
Your goal is to complete the single deck in less than one minute. If you have trouble with the
Negative Number concept, counting below zero, it might be helpful to think of the outside
temperature in winter.   Suppose it were really cold outside, say 3 degrees, and then it began to get
colder…2 degrees, then 1 degree and finally "Zero". Now suppose it got colder still and the
temperature fell below zero…1 below, 2 below, 3 below and so on. The negative card count is just
the same. The count began at zero and as minus cards are seen, the count falls below zero…-1, -2, -
3, and so on. When the temperature rises the below zero numbers head towards zero…3 below to 2
below to 1 below to Zero…and then above Zero to + 1, +2, +3, +4 and so on.

EXERCISE # 5…THE "RUNNING COUNT"…cont.

Shuffle a single deck.
Deal cards in pairs…two at a time
Remember two small cards = +2
Remember two big cards = - 2
Remember one small card & one big card cancel each other = 0

You are trying to simulate a card counters thought process. Many times Card Counters do not count each card as it is played, but rather count in pairs, because so often cards cancel each other.
It's really a personal preference…But give it a try.

Your goal is to accurately complete this exercise in 45 seconds or less

EXERCISE # 6…"COUNT the BOARD"

Shuffle a single deck.
Deal the cards around the table into 6 or 7 hands plus the dealer
Count the total Plus/Minus value of the layout…include the dealer's up card
Play each hand and count the "Hit" cards
Count the dealer's Hole Card
Count the dealer's Hit cards
Announce the Count for that Round

CONTINUE the NEXT ROUND:
Deal the cards around the table into 6 or 7 hands plus the dealer
Count the total Plus/Minus value of the layout…include the dealer's up card
Play each hand and count the "Hit" cards
Count the dealer's Hole Card
Count the dealer's Hit cards
Announce the Count for that Round…**THEN**
Add the Current Board Count to the Previous Board Count…Round After Round

This exercise is intended to assist floor personnel who notice a large wager or hear "Cheques Play", in the middle of the shoe. Counting the Board from that point forward gives the floor person an indication of the direction in which the shoe is going. As an example; Suppose "Cheques Play" in the middle of a shoe. The floor person begins to Count the Board and determines that the count is becoming more Positive. (The floor doesn't of course, know the Count at the point they heard "Cheques Play"…but the call itself implies a large wager.) Determining the count per round will allow you to evaluate a suspect player's money movement in relationship to the count from that point forward. If the count continues to get stronger and the player loses, you should note the next bet carefully to see if the wager increases. If the count begins to lower, then watch to see if the player reduces his bets as well.