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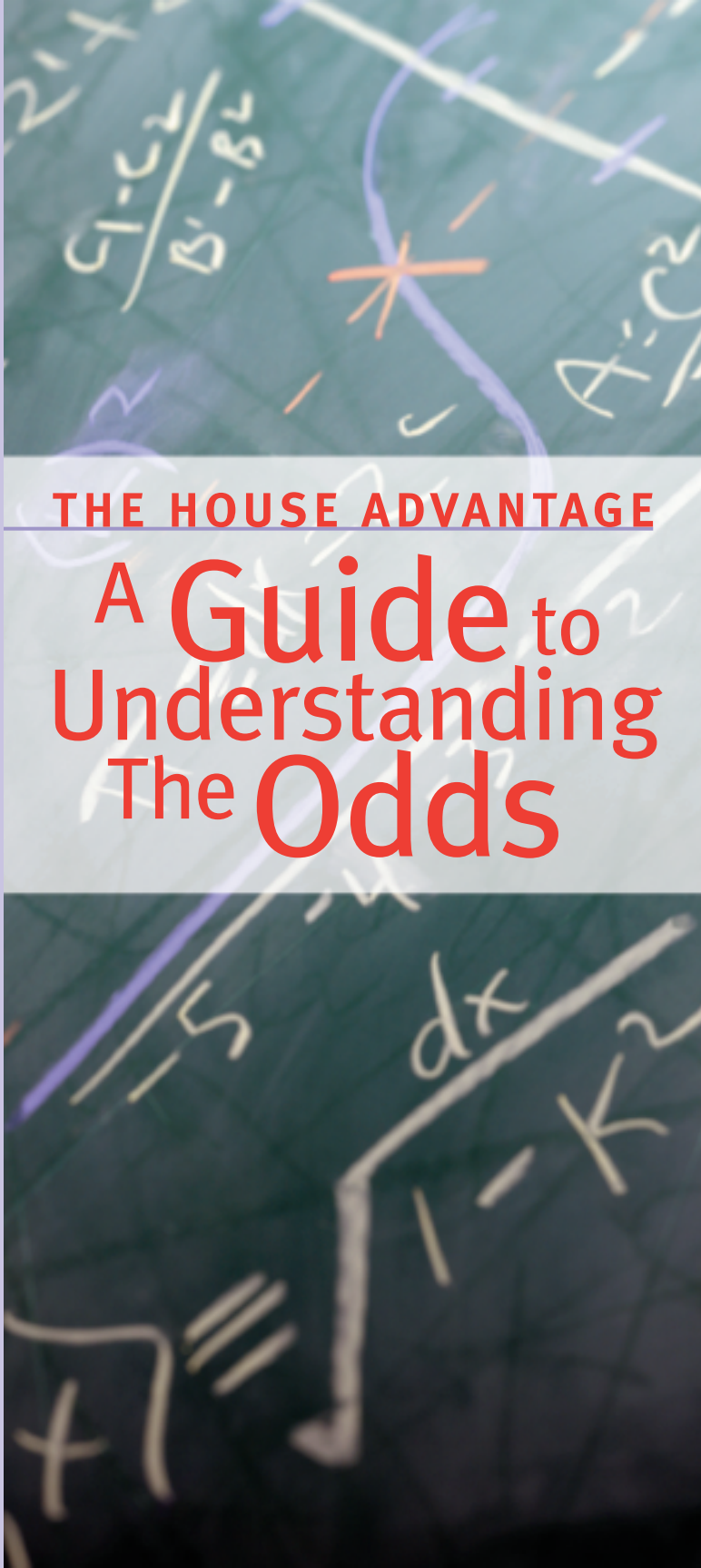

THE HOUSE ADVANTAGE

A Guide to Understanding The Odds

Whether you play slots, craps, blackjack, roulette or any other game in a casino, it is important to remember that games of chance are based on random outcomes and always favor the casino. These games of chance are a form of entertainment, at a price to you, the player. Casino gaming should not be considered a way to make money.

This booklet provides information about the advantage the casino has in various games — also known as the "house advantage." Beyond mathematical probabilities, it covers other factors a player should take into account, such as the amount wagered, length of time spent playing a game and, to a degree, the level of a player's skill at certain games. Finally, the booklet discusses some of the common myths associated with gambling that should be understood before betting on any casino games.

We encourage you to play responsibly by betting within your limits and by recognizing that over time the house will come out ahead.

Understanding the House Advantage

Casino games are designed with a house advantage. Mathematically, the house advantage is a measure of how much the house expects to win, expressed as a percentage of the player's wager. For example, in a wager with a house advantage of 5 percent, the player will lose, on average over time, $5 for every $100 wagered. House advantages vary by region, casino and game. In some games, player betting or skill decisions can affect the house advantage, but it's important to keep in mind that the house always has some advantage against the typical player.

Assuming standard rules and players with average skills, typical house advantages in popular casino games range from 1.1 percent (player/banker bets) to 14.4 percent (tie bets) for baccarat; 0.5 percent to 1.5 percent for twenty-one ("blackjack"); 1.4 percent to 16.7 percent for craps; and 2.7 percent to 5.3 percent for roulette. Slot machines typically have house advantages of 0.5 to 12 percent; a player cannot influence the outcome of traditional slot machine play through any decision-making strategy.

Other Factors Behind Winning and Losing

While the house advantage is useful for understanding the casino's expected win (or a player's expected loss) per bet, there are other factors that can influence the amount a player might spend when gambling in a casino.

Length of Time Played, Speed of Play and Amount Wagered:

Because the odds always favor the house, the longer or faster a person plays a casino game, the more the person should expect to lose. In the same way, the more a person wagers, the more the person should expect to lose. For instance, if the "hold percentage" (or house advantage) for a typical slot machine is 10 percent, then, on average, a player will win back $90 for each $100 wagered. However, if this player then re-wagers the $90, the player will again win back, on average, 90 percent of the $90, or $81. As the betting continues, over time players are more and more likely to lose money, rather than win. An individual may lose more or less than the average, but the machine always comes out ahead in the long run.

Skill: The chances of winning are maximized when games involving an element of skill (in playing or betting) — such as blackjack or video poker — are played at the highest level. *However, with few exceptions, it's important to remember that the house continues to have a statistical advantage in every play of every game, even against a skillful player.*

Superstitions and False Beliefs

It might be fun to imagine that rubbing a rabbit's foot improves a player's chances of hitting a jackpot, but the reality is that this "magical thinking" has no impact whatsoever. Cheating aside, there's nothing a player can do — no ritual and no lucky charm — to influence the outcome of any casino game. Superstitions can't determine whether a player wins or loses because every casino game — whether it's blackjack, craps or a slot machine — is based on randomness, or chance.

To understand gambling, it's also important to understand the concept of "independent events." Each spin of the wheel or roll of the dice is considered an "independent event," meaning that the chances of a specific outcome remain the same and are not influenced by previous events. For example, if a player has just rolled snake eyes, the player is no more or less likely on the next roll to get snake eyes again. Slot machines are not any more or less likely to hit a jackpot just because they haven't hit for a while. And roulette wheels are no more or less likely to land on red if they have just previously landed on black. So-called gambling "hot streaks" are merely random sequences of events perceived by players to be favorable. Over time, the overall outcome of the game will favor the casino and always approach the house advantage.

Government Regulation

While some people believe that casinos can "rig" slot machines and other games, the reality is that the actions of every casino in the United States are tightly controlled by regulatory agencies, which ensure that all the games are fair and determined by chance. Slot machines must meet stringent technical and operating standards, including specific payout percentages, before they ever reach the casino floor.

For more information, visit the American Gaming Association Web site at ***www.americangaming.org****.*

Slot machines are **not** any more or less likely to **hit** a **jackpot** just because they **haven't hit** for a while.

CASINO HOUSE ADVANTAGE AND EXPECTED LOSS

	House Advantage	For every $100 bet, the player can expect to lose …
BACCARAT		
Player/Banker	1.1%-1.2%	$1.10-$1.20
Tie	14.4%	$14.40
BLACKJACK	0.5%-1.5%	50¢-$1.50
CRAPS		
Pass/Don't Pass	1.4%	$1.40
Prop Bets	10%-16.7%	$10-$16.70
KENO AND SPORTS		
Keno 1-15 Spots	25%-30%	$25-$30
Video Keno	8%-15%	$8-$15
Sports Betting (Bet $11/Win $10)	4.5%	$4.50
ROULETTE		
Single Zero	2.7%	$2.70
Double Zero	5.3%	$5.30
REELS		
Nickel Slots	7%-12%	$7-$12
Quarter Slots	5%-10%	$5-$10
Dollar Slots	2.5%-6%	$2.50-$6
VIDEO POKER	0.5%-5%	50¢-$5

Note: For games with strategic decisions (e.g., blackjack, video poker), an "average player" strategy is assumed. For games in which rule/pay variations exist (for example, slot machines), a typical offering is assumed although an operator may, subject to governmental requirements, provide for a greater or lower house advantage. The information in this brochure is provided for the purposes of illustration only. Actual house advantages and hold percentages may vary.