

# What are Las Vegas odds?

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Las Vegas odds refer to the probability or likelihood of a certain outcome in a particular event or game, as determined by bookmakers in Las Vegas, Nevada. These odds are based on various factors such as statistical analysis, expert predictions, and betting patterns. They are primarily used in the gambling industry to inform bettors of the potential payout they could receive if they place a successful bet. Las Vegas odds are constantly updated and are widely considered to be a reliable indicator of the expected outcome of a sporting event or game.

## **FAQ: What are Las Vegas odds?**

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**When statistical types use the word odds they mean the probability that an event will occur divided by the probability that an event will not occur, that is, odds =  $p/(1-p)$ . However, in everyday conversation, people can use the word odds with a slightly different but related meaning. In ordinary conversation people often mean Las Vegas or gambling odds. So you will hear terms like 3to1 or 3to2. You may also hear people talk about these matters in terms of chance, as in, the chance is 3in4 or 3in5. So what do people mean when they say odds are 3to1 or the chance is 3in4?**

**Consider a probability of .5 ( $1/2 = .5$ ) which is equivalent**

to the statistical odds of 1

$(.5/(1-.5) = .5/.5 = 1)$ .

In Las Vegas odds this would be given as 1to1, that is, one chance for to one chance against.

When expressed as chance, it would be 1in2, that is, one chance in 2 of winning.

Now when a gambler says that the odds are 3to1, they mean that there are 3 chances

to win to 1 chance to lose. Alternatively, the gambler express this as the chance is 3in4,

that is, 3 chances to win in 4 total chances.

What they really mean is that the

probability is .75 ( $3/4 = .75$ ) or that the statistical odds are 3 (odds =  $.75/(1-.75) = .75/.25 = 3$ ).

You will also see Las Vegas

odds of 3to2 (which is equivalent to 1.5to1, but you will never see it written this way). Odds

of 3to2 is just another way of saying that there are 3 chances of winning to 2 chances of losing.

The gambler may also express odds of 3to2 as a chance of 3in5, that is, 3 chances to win in

5 total chances. Whether given as odds of 3to2 or

chance of 3in5 the statistical probability is .6 ( $3/5 = .6$ ) and the statistical odds are 1.5 (odds =  $.6/(1-.6) = .6/.4 = 1.5$ ).

The table below gives the Las Vegas (gambling) odds, chance, statistical odds and probability for a number of different combinations.

### Table of Gambling Odds, Chance, Statistical Odds and Probability

vegas odds	chance	stat odds	prob
10to1	10in11	10.0000	0.9091
9to1	9in10	9.0000	0.9000
8to1	8in9	8.0000	0.8889
7to1	7in8	7.0000	0.8750
6to1	6in7	6.0000	0.8571
5to1	5in6	5.0000	0.8333
4to1	4in5	4.0000	0.8000
3to1	3in4	3.0000	0.7500
7to3	7in10	2.3333	0.7000
2to1	2in3	2.0000	0.6667

**3to2 3in5 1.5000 0.6000**

**1to1 1in2 1.0000 0.5000**

**2to3 2in5 0.6667 0.4000**

**1to2 1in3 0.5000 0.3333**

**3to7 3in10 0.4286 0.3000**

**1to3 1in4 0.3333 0.2500**

**1to4 1in5 0.2500 0.2000**

**1to5 1in6 0.2000 0.1667**

**1to6 1in7 0.1667 0.1429**

**1to7 1in8 0.1429 0.1250**

**1to8 1in9 0.1250 0.1111**

**1to9 1in10 0.1111 0.1000**

**1to10 1in11 0.1000 0.0909**

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