

Some Useful Bridge Probabilities

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The percentages for card division presume that there is NO evidence from bidding or play to alter the probabilities. With no information from the bidding, one may apply the following simple rules to fineness or play for the drop for the K, Q, or J.

The rule for the King is 10 ever 11 never so with 2 cards missing go for the drop (52%).

The rule for the Queen is 8 ever 9 never so with 3 cards missing go for the drop (52%) or the cards may be 2-2 (41%) or singleton (12%).

The rule for the Jack is 6 ever 7 never or with 6 cards missing go for the drop (54%), the cards may be 3-3 (35%), a doubleton (18%), or a singleton (2%).

Thus with 3, 5, or 7 cards missing do NOT expect to drop the K, Q, J, respectively!

Some useful percentages for Splits!

1-1 52% 2-2 41% 3-3 35% 4-4 33%

Others may be approximated with ratios:

3-2 $2/3=66\%$ (actual = 68%) 4-2= $2/4=50\%$ (actual=52%) 4-3 =75% (actual= 62%)

Listen to the bidding.

For example, suppose an opponent has pre-empted showing a 7-card club suit, then there are 6 'vacant spaces' for other cards while if declarer and dummy together have 4 clubs the other defender has 2 clubs that leaves 11 vacant spaces in that hand. If there are 4 cards in another suit (say hearts) in those hands the probability of them splitting 2-2 drops from over 40% to under 35% while the hand with more vacant spaces is 5 times as likely than the other to hold 3 or 4 hearts.

Probability of a partnership having a good fit

Number of cards between two hands 7 8 9 10 11 Percentage of deals 16% 46% 28% 9% 2%

Probability of your partner having a fit with a single suit in your hand

Cards in Suit | Prob of at Least | Total Number of Cards Held by You and Partner

	8 cards fit	7 cards	8 cards	9 cards	10cards
4	34%	32%	21%	9%	2%
5	54%	29%	31%	17%	5%
6	76%	19%	33%	28%	12%
7	93%	7%	26%	35%	22%

Probability of partner having a fit with one of your TWO suits

Your suits 4-3 /4-4 /5-3/5-4/5-5 Probability of fit 49% /60% /66% /74% /84%

Being dealt 7-12 points accounts for over half of all hands.

It is unlikely any hand in a 26-board session has over 24HCP. A partner who bids 1NT (12-14) probably has 12 or a poor 13. A partner who bids 2NT (20-22) probably has only 20 HCP.

Nearly half the hands in a 26-board match are balanced. About 2/3 of the hands contain a 5-card suit or longer, and 1/3 of all hands will contain a singleton or void.

Bear in mind that they above are the mathematically determined values, and do not consider the fact that hands which are imperfectly 'shuffled and dealt' often are more balanced than those randomly generated on a computer.

The most common hand patterns are: 4432 (21.6%) 4333 (10.5%) 5332 (15.5%)

Frequent Hand patterns when an opponent bids 1NT are:

5-card suit (44.3%) 6-card suit (15.8%) 5-5 suits (4.1%)

Miscellaneous Observations --- Number of different

hands a player can receive = 635,013,559,600 or 635 billion

possible deals = 53,644,737,765,488,792,839,237,440,000 or 53 octillions

possible auctions = 128,745,650,347,030,683,120,231,926,111,609,371,363,122,697,557 or 128 quindecillions