The Law of Total Tricks

By Neil H. Timm

Larry Cohen (1972) in his book “To Bid or Not to Bid” developed a series of rules using the total number of trumps between two hands on when to compete to the three level. For example with only sixteen trumps and both sides vulnerable he shows that it is better to let the opponents play in three hearts and for you not to bid three spades when both sides have only 16 trumps. He calls this “chart logic”. To see this more clearly lets look at the chart:

Both Sides Vulnerable with 16 Trumps

Contract played in three spades		Contract played in three hearts	
Our Tricks won	Our Score	Their Tricks won	Our Score
10	+170	6	**+300**
9	+140	7	**+200**
8	-100	8	**+100**
7	-200	9	**-140**

From the chart, we see no matter how the trumps break, when both are vulnerable, that it is better to allow the opponents play the contract in three hearts.

Rule: When both are vulnerable do not compete to the three level with only 16 trumps.

Or, given that both sides have eight trumps between them, both can be expected to make eight tricks, making either two hearts or two spades. This being the case, you must bid to the three level in hearts; however, do not compete to the three level in spades when both sides are vulnerable ---- this is the “LAW”!

In Larry’s new book “Following the Law” the sequel To Bid or Not to Bid, he has a simple formula that may be used when both sides are **vulnerable.**

Formula: ∑Trumps – 11 = ∑ Bids

Where the symbol ∑ denotes “SUM OF”; thus, applying the formula 16 -11 = 5. The bid of 3♥ + 2♠ = 5 so do not bid to the level of three spades.

Important Note: The formula should only be used when both sides are vulnerable.

What happens when both sides are non-vulnerable? Again, we may make a chart:

Both Sides Non-vulnerable with 16 Trumps

Contract played in three spades		Contract played in three hearts	
Our Tricks won	Our Score	Their Tricks won	Our Score
10	**+170**	6	+150
9	**+140**	7	+100
8	-50	8	**+50**
7	**-100**	9	-140

From the chart we see that by competing to the three level, when both sides are non-vulnerable, succeeds in three out of four cases. Thus, while the formula fails we may always use chart logic and bid to the three level when non-vulnerable and having only 16 trumps.

What if the spade bidder is vulnerable and the heart bidder is non-vulnerable. Then we have the following chart.

Spade (V) and Hearts (NV) with 16 Trumps

Contract played in three spades		Contract played in three hearts	
Our Tricks won	Our Score	Their Tricks won	Our Score
10	**+170**	6	+150
9	**+140**	7	+100
8	-50	8	**+50**
7	-200	9	**-140**

And finally, suppose the heart bidder is vulnerable and the spade bidder is not. Then we have the following chart.

Spade (NV) and Hearts (V) with 16 Trumps

Contract played in three spades		Contract played in three hearts	
Our Tricks won	Our Score	Their Tricks won	Our Score
10	+170	6	**+300**
9	+140	7	**+200**
8	-50	8	**+100**
7	**-100**	9	-140

From the charts we have the following rule.

Rule: Never compete to the three level when both sides are vulnerable or with unfavorable vulnerability with only 16 trumps. However, with favorable vulnerability or both non-vulnerable, compete to the three level playing three spades over three hearts.

The above rules are based upon our chart analysis and bidding the majors. What if one side is bidding a major and the opponents are bidding a minor? Again, when both sides are vulnerable, we may use the simple formula. Looking at an example, suppose the opponents open the bidding 2♦ and your partner bids 2♥ followed by a bid of 3♦ by the opponents. Should you bid 3♥ with three hearts?

Applying the formula there are probably 9 (diamonds) + 8 (hearts) = 17 trumps and 17-11 = 6. Thus, bid 3♥ over 3♦.

However, suppose the bidding went:

RHO	YOU	LHO	PARTNER
2♦ (weak)	pass	3♦	Dbl
Pass	??		

Now what do you bid? At equal vulnerability bid your three card major. However, it they are vulnerable and you are not, pass.

The next logical question you must ask yourself is what happens when both sides have 17 trumps in the majors? This is more complicated. However, let's begin with a logic chart.

Both Sides Vulnerable with 17 Trumps

Contract played in four spades		Contract played in four hearts	
Our Tricks won	Our Score	Their Tricks won	Our Score
10	**+620**	7	+300
9	-100	8	**+200**
8	-200	9	**+100**
7	**-300**	10	-620

Both Sides Non-vulnerable with 17 Trumps

Contract played in four spades		Contract played in four hearts	
Our Tricks won	Our Score	Their Tricks won	Our Score
10	**+420**	7	+150
9	-50	8	**+100**
8	-100	9	**+50**

7	**-150**	10	-420

The charts suggest that if the opponents can win only 8 or 9 tricks in four hearts that we should not bid four spades winning the same number of tricks.

Based upon 10000 deals, the likelihood of winning 10 tricks occurs about 10% of the time while winning 8 or 9 tricks occurs almost 33% of the time. Hence, it is best to complete to the four level and bid four spades over four hearts with only 17 trumps. However, if you were to apply the formula, 17-11=6 it would suggest that one not compete to the four level.

Rule: With 17 trumps (vulnerable or non-vulnerable), one may sometimes complete to the four level when bidding spades over hearts.

Rule: With 17 trumps, never bid to the four level of a minor over a three level major suit bid with equal or unfavorable vulnerability.

When bidding four spades over four hearts and both sides vulnerable, the formula suggested that one **not** compete at the four level. However, by taking into account hand shape (distribution), double fits, and poor honor combinations, one may adjust the "Formula" for the law to better decide whether to bid or pass. Let's see how it works.

1) For hands with poor honor combinations subtract one trick; however, with few honor combinations add one trick.

2) For a double fit in two suits, add one trick; but, for a negative fit subtract one.

3) For balanced (flat) hands, subtract one trick; however, for non-balanced hands add one trick.

4) For poor trump quality, subtract one trick (no A/K/Q); however, with a high honor or good intermediaries add one trick.

Taking these factors into account the formula becomes:

Adjusted Formula: ∑Trumps – 11 + positive factors – negative factors = ∑ Bids

Adding the adjustments to the formula allows one to apply it in more situations since if the factors allow one to reach the 19 "trumps" level observe that 19 – 11 = 8, allows each to bid to the four level (e.g. 4♥ over 4♣/4♦, or 4♠ over 4♥, but not 5♥ over 4♠).

We now look at an example. You hold the following hand knowing the opponents hold nine hearts and both are vulnerable.

♠J8765 ♥QJ2 ♦J762 ♣Q

Applying the formula with no adjustment 18 – 11 = 7 you expect to be down only one so you might bid four spades if you were to make no adjustments. However, with spades as trumps subtract one (-1) for no high honor, for poor honor combinations outside of trump subtract one (-1), for the unbalanced hand add +1.

Using the formula with adjustments we have that 18 – 11 -2 +1 = 6. You should not bid to the four level even with 10 trumps!

Do not apply the law without taking into account adjustments.

We look at a second example from Larry Cohen's new book. Your partner opens 2♥ and you hold the following hands:

1) ♠K104 ♥K876 ♦QJ3 ♣QJ4

2) ♠K43 ♥KJ76 ♦QJ43 ♣54

In both situations you have 10 trumps with say 18 total trumps and 18 -11=7 so do you bid 4♥ over 3♠?

Lets look at each of the hands. With hand (1) you have the K of trump (+1), but many Q's and J's in the other suits (-1), and a flat hand (-1) thus 18 – 11 -2 +1 = 6, do not compete to the four level!

With hand (2) you also have the king of trump (+1), a flat hand (-1), but fewer minor honors in the other suits; thus, 18-11-1+1=7, compete to the four level.

To read more on making adjustments to the LAW, read Larry Cohen's (1995) book "Following the Law the Total Tricks Sequel."

THE LAW OF TOTAL TRICKS is not the same as THE LAW OF TOTAL TRUMPS. They are related but not necessarily equal. For more on this topic see the book by Mike Lawrence and Anders Witgren (2004), "I FOUGHT THE LAW of Total Tricks".

Briefly, tricks and trumps are not the same because of distribution, which I have tried to address with my corrections. A Formula for total tricks follows; provided one has a fit.

Average Total Tricks (19-21 HCP both hands) = 13- Your Short Suit Total (SST) both hands (Ave is 4) = 9 Tricks

If both hands have a SST=3 then the Number of Tricks = 10 or game in a Major with a FIT! With 22-24 HCP add more trick = 10; 25-27 HCP add 2 tricks =12, 28-30 add 3 =13, a small slam; and 31-33 add 3 tricks, grand slam. The lower the SST, the more tricks.