

TD NEWSLETTER 6

I was recently asked to explain cross-IMP scoring. I thought that others members might be interested in the explanation, especially as we have quite a few newcomers to the game. I have also included details of normal (match point) pairs scoring. If you want to improve it is essential to have some understanding of the scoring system.

As always, I would welcome feedback. Please let me know what you think of this newsletter and ideas for future topics. Also do feel free to contact me if you have any specific questions.

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MATCH POINT PAIRS

First we will look at match point pairs scoring, which is the method used at almost all our pairs events. Let us look at a 6-table event where you play 12 boards. This is board 1.

Board 1								
N/S	E/W	Contract	By	Tricks	N/S score	E/W score	N/S MPs	E/W MPs
1	7	4S	N	12	480		10	0
2	9	4S	N	11	450		7	3
3	11	4S	N	11	450		7	3
4	8	3NT+1	N	10	430		4	6
5	10	4S	N	10	420		2	8
6	12	3NT	N	9	400		0	10

The red figures show the match points that are calculated for the board as follows:

A pair gets 2 points for each pair (playing in the same direction) that they beat and 1 point for each pair with whom they equal. In this example N/S Pair 1 got the best score by playing in 4S and making two overtricks. They beat all the other N/S scores (five other pairs) and so score 10 match points. The next best N/S score is 4S making one overtrick. Pair 2 beat four other pairs (3 x 2 = 6 match points) and equalled one other pair (1 match point) so get 7 match points in total. The worst N/S pair were pair 6. Even though they made their contract they made fewer tricks than any other pair. So they get 0 match points. Consequently the best E/W pair were their opponents who get a top, scoring 10 match points.

Now look at board 2 where N/S are vulnerable.

Board 2								
N/S	E/W	Contract	By	Tricks	N/S score	E/W score	N/S MPs	E/W MPs
1	7	4S	N	12	680		10	0
2	9	4S	N	11	650		7	3
3	11	4S	N	11	650		7	3
4	8	3NT+1	N	10	630		4	6
5	10	4S	N	10	620		2	8
6	12	7Hxx-13	N	0		7600	0	10

You will notice that the contracts are all the same apart from pair 6 v pair 12. This time pair 6 have a complete bidding misunderstanding and end up in 7H redoubled making no tricks. This gives E/W the maximum possible score of 7600! However the match points are exactly the same as in board 1. So pair 6's disaster is just the same as just making their contract on board 1. As we will see later this is very different from when we score using cross-imps.

So what matters at match-pointed pairs is getting a higher score than the other pairs sitting in the same direction. The size of the difference doesn't matter. E.g. on board 1 E/W 12 beat E/W 10 by just 20 (the difference between 400 and 420) and on board 2 the margin was 8220 (the difference between 7600 and -620) yet the match points were just the same.

After you have put your result for a board into the Bridgемate you will see a percentage score for N/S and for E/W. These are simply the match points for the board as a percentage of the maximum possible. So, for example, pair 2 (N/S) will get 70% and pair 9 (E/W) will get 30%. Obviously if you are

only part way through the session these percentages will probably change as more results are taken into account.

Once all the boards have been played the match points for each pair are added up.

<i>Pair</i>	Board number														
	1	2	3	4	5	6	7	8	9	10	11	12	<i>Total</i>	%	<i>Rank</i>
<i>1</i>	10	10	0	4	0	2	10	10	0	10	4	2	62	51.67	6
<i>2</i>	7	7	10	0	8	6	0	1	8	6	2	0	55	45.83	9=
<i>3</i>	7	7	4	0	2	4	3	1	10	0	10	10	58	48.33	8
<i>4</i>	4	4	2	2	4	10	3	2	3	8	8	2	52	43.33	11
<i>5</i>	2	2	4	8	6	8	7	6	7	8	4	4	66	55.00	3=
<i>6</i>	0	0	8	6	10	0	3	4	6	4	10	4	55	45.83	9=
<i>7</i>	0	0	8	8	2	4	3	4	0	10	0	6	45	37.50	12
<i>8</i>	6	6	0	10	4	2	7	9	4	6	6	8	68	56.67	2
<i>9</i>	3	3	6	2	8	6	7	6	10	0	2	8	61	50.83	7
<i>10</i>	8	8	6	10	0	10	0	0	7	2	8	10	69	57.50	1
<i>11</i>	3	3	2	4	10	8	7	8	2	4	6	6	63	52.50	5
<i>12</i>	10	10	10	6	6	0	10	9	3	2	0	0	66	55.00	3=

Since a top on each board is 10 then the maximum possible score is $12 \times 10 = 120$. So the percentages are calculated by dividing the total by 120. You will see that pair 6 recovered a bit from their bad start and finished 9th overall. You will see later how the situation is different when scoring using cross imps.

TEAMS

Before looking at cross-imps we will look at teams scoring.

Unlike at pairs there are only two scores that matter on any particular board. They are your score and those of your team-mates. Let us suppose that you, as N/S, make 4S vulnerable for a score of +620. You team-mates (playing E/W) are defending 3S which makes 10 tricks for a score of -170. The difference between the two results is +450. That is then converted to IMPs (International Match Points) using the following scale.

Difference	IMP
0-10	0
20-40	1
50-80	2
90-120	3
130-160	4
170-210	5
220-260	6
270-310	7

Difference	IMP
320-360	8
370-420	9
430-490	10
500-590	11
600-740	12
750-890	13
900-1090	14
1100-1290	15

Difference	IMP
1300-1490	16
1500-1740	17
1750-1990	18
2000-2240	19
2250-2490	20
2500-2990	21
3000-3490	22
3500-3990	23
4000+	24

So +450 converts to 10 IMPs.

If both contracts had made only 9 tricks then you would have scored -100 for going down in 4S and you team-mates would have conceded 140 for 3S just making. That difference is -240 and that converts to 6 IMPs.

These two examples show why it pays to bid borderline vulnerable games at teams. I.e. there is more to be gained when the game is making than there is to be lost when it goes down. If you would like to know more about teams tactics have a look at these team tips:

<https://www.bridgewebs.com/kendal/Teams%20Tips.pdf>

When you have played all your boards you simply add up all your IMPs to get a grand total. When you look at the results at the club or on the club website you can also see Cross-IMP scores for each pair. That allows each pair to see how they have done compared with all the other results played the same way by the other teams. That is what we will look at next.

CROSS-IMPs

We play teams once a month on Thursdays and once every other month on Mondays. As mentioned earlier each pair can also look at their cross-imp score as well as their team result. On Thursdays we also score using cross-imps in the Summer Cup pairs competition. The calculation of cross-imps is exactly the same for teams and for pairs. Let us look again at board 1 that we started with.

Board 1								
N/S	E/W	Contract	By	Tricks	N/S score	E/W score	N/S IMPs	E/W IMPs
1	7	4S	N	12	480		+1.6	-1.6
2	9	4S	N	11	450		+0.6	-0.6
3	11	4S	N	11	450		+0.6	-0.6
4	8	3NT+1	N	10	430		-0.6	+0.6
5	10	4S	N	10	420		-0.6	+0.6
6	12	3NT	N	9	400		-1.6	1.6

The red columns now show the cross-imps for each pair. Let's see how cross-imps are calculated for pair 1. Their score of +480 is compared with each of the other N/S scores and then converted to IMPs using the same scale as for teams. So the five comparisons are:

		Diff	IMPs
+480	+450	+30	1
+480	+450	+30	1
+480	+430	+50	2
+480	+420	+60	2
+480	+400	+80	2

Those 5 IMP scores are averaged to give +1.6. That is the score that you will see on the Bridgmate when you have entered the result.

If you compare the IMPs to the match pointed pairs traveller at the beginning you will see that on this board the scores are all much of a muchness. Every pair has bid and made game and there is a small reward for making overtricks. That is a very big difference from match pointed pairs where an overtrick can make a huge difference.

Now let us look at board 2 from earlier.

Board 2								
N/S	E/W	Contract	By	Tricks	N/S score	E/W score	N/S MPs	E/W MPs
1	7	4S	N	12	680		+6	-6
2	9	4S	N	11	650		+5	-5
3	11	4S	N	11	650		+5	-5
4	8	3NT+1	N	10	630		+4	-4
5	10	4S	N	10	620		+4	-4
6	12	7Hxx-13	N	0		7600	-24	+24

You will now see that pair 6's result is a real disaster at cross-imps since the size of the result really matters. In this example pair 6 lose 24 IMPs on the board (which is the maximum possible score).

Once all the boards have been played the IMPs get added up.

Pair	Cross-IMPs		Match point pairs		
	Total	Rank	Total	%	Rank
1	2.2	7	62	51.67	6
2	-14.6	11	55	45.83	9=
3	-13.0	10	58	48.33	8
4	+7.2	4	52	43.33	11
5	+26.0	1	66	55.00	3=
6	-30.6	12	55	45.83	9=
7	-10.0	9	45	37.50	12
8	+6.4	5	68	56.67	2
9	+3.8	6	61	50.83	7
10	-7.2	8	69	57.50	1
11	+11.6	3	63	52.50	5
12	+18.2	2	66	55.00	3=

The red figures are the Cross-IMP results and the black figures are the match point results we saw earlier. You will notice that the ranking order is different. Pair 6 who had the disaster on board 1 are now bottom.

AVERAGES

The TD sometimes has to award averages to pairs who can't play a board. Possible reasons are that they don't have time to play it, or they played the wrong board earlier or they have looked at their cards and then noticed that they didn't have precisely 13 cards.

The TD can award Average Plus if the side is not at fault, Average if the side is partly at fault and Average Minus if the side is fully at fault. At match pointed pairs Average is 50%, Average Plus is 60% and Average Minus is 40%. (If a pair scores more than 60% on the rest of the boards then Average Plus would be that percentage. Similarly If a pair scores less than 40% on the rest of the boards then Average Minus would be that percentage.)

So if pairs 4 and 8 were given Average on board 1 it would look like:

Board 1								
N/S	E/W	Contract	By	Tricks	N/S score	E/W score	N/S MPs	E/W MPs
1	7	4S	N	12	480		9.8	0.2
2	9	4S	N	11	450		6.2	3.8
3	11	4S	N	11	450		6.2	3.8
4	8				Ave	Ave	5	5
5	10	4S	N	10	420		2.6	7.4
6	12	3NT	N	9	400		0.2	9.8

Average is simply 50% of a top (50% of 10 in this case). You might notice that all the other scores are affected. In particular a top now is only 9.8 and a bottom is 0.2. If you are brave and really want to know why this is so, you can read the next page.

At IMPs an Average is 0, Average Plus is +3 and Average Minus is -3.

SCORING AVERAGE

One way to calculate match points is to use the frequency of each result from highest to lowest result. Then calculate match points using the formula

$$mp_i = mp_{i-1} - f_{i-1} - f_i$$

$$mp_0 = 2N - 1 \text{ (where } N \text{ is the number of results)}$$

$$f_0 = 0$$

where

f_i = frequency i

mp_i = match points for frequency i

Board 1								
N/S	E/W	Contract	By	Tricks	N/S score	E/W score	N/S MPs	E/W MPs
1	7	4S	N	12	480		10	0
2	9	4S	N	11	450		7	3
3	11	4S	N	11	450		7	3
4	8	3NT+1	N	10	430		4	6
5	10	4S	N	10	420		2	8
6	12	3NT	N	9	400		0	10

So the frequency chart and match points for North/South are:

NS score	Frequency	Formula	MPs	
	$f_0 = 0$	$mp_0 = 2 \times N - 1$	$2 \times 6 - 1$	11
480	$f_1 = 1$	$mp_1 = mp_0 - f_0 - f_1$	$11 - 0 - 1$	10
450	$f_2 = 2$	$mp_2 = mp_1 - f_1 - f_2$	$10 - 1 - 2$	7
430	$f_3 = 1$	$mp_3 = mp_2 - f_2 - f_3$	$7 - 2 - 1$	4
420	$f_4 = 1$	$mp_4 = mp_3 - f_3 - f_4$	$4 - 1 - 1$	2
400	$f_5 = 1$	$mp_5 = mp_4 - f_4 - f_5$	$2 - 1 - 1$	0

Let us look at what happens when there is an average

Board 1								
N/S	E/W	Contract	By	Tricks	N/S score	E/W score	N/S MPs	E/W MPs
1	7	4S	N	12	480		9.8	0.2
2	9	4S	N	11	450		6.2	3.8
3	11	4S	N	11	450		6.2	3.8
4	8				Ave	Ave	5	5
5	10	4S	N	10	420		2.6	7.4
6	12	3NT	N	9	400		0.2	9.8

When there is an average then there is one fewer result in the frequency table so the frequencies are factored up accordingly. In this case there are 5 frequencies rather 6 so the frequencies get factored up by 6/5, i.e 1.2

So the frequency chart and match points for North/South are:

NS score	Frequency	Formula	MPs	
	$f_0 = 0$	$mp_0 = 2 \times N - 1$	$2 \times 6 - 1$	11
480	$f_1 = 1.2$	$mp_1 = mp_0 - f_0 - f_1$	$11 - 0 - 1.2$	9.8
450	$f_2 = 2.4$	$mp_2 = mp_1 - f_1 - f_2$	$9.8 - 1.2 - 2.4$	6.2
420	$f_3 = 1.2$	$mp_3 = mp_2 - f_2 - f_3$	$6.8 - 2.4 - 1.2$	2.6
400	$f_4 = 1.2$	$mp_4 = mp_3 - f_3 - f_4$	$2.6 - 1.2 - 1.2$	0.2

So that's it. I'd be delighted to know if anyone got this far so please do let me know.