

# UK Chess Challenge – Tie-Breaks Explained

## Explanation of the Tie-Breaks

In 2018 there will be no play-offs. Instead, players tied on the same number of points will be separated by a series of tiebreaks. Think of these like 'goal difference' and 'goals scored' at the World Cup.

Unfortunately these do get rather complicated! Tiebreaks are applied in the following order.

1. Direct Encounter
2. Median-Buchholz
3. Buchholz Cut 1
4. Buchholz
5. Drawing of Lots – note: this will only be applied to determine the Ultimo and Ultima titles, or any of the top 3 qualifiers.

This is all you really need to know – the software we use will calculate all this in the background. However, for those of you mathematically inclined read on...

### 1. Direct Encounter

If you have a tournament where two players are tied, if they have played, then the winner of that game finishes higher. If they haven't, then this tie-break can't apply.

If more than two players are tied, then the tied players must have played each other for this tie-break to be applied. For example, if three players tie: A, B and C, then you must have had all of A v B, B v C and A v C in the tournament for the tie-break to be used.

### 2. Median-Buchholz

Median what?

Buchholz means the Sum of the Opponents' Scores. Suppose a player has this record

Rd.	Bo.	SNo	Name	Rtg	Club/City	Pts.	Res.
1	4	21	O'dell Thomas	0	Warwick Preparatory	3,0	w 1
2	4	25	Russ Ellen	0	Budbrooke	1,5	s 1
3	3	31	Zanyi Thomas	0	Crackley Hall	3,0	w 1
4	2	11	Dicen Elis Denele	0	St. Patrick's	4,0	s 0
5	3	8	Bailey Malakhi	0	Hallfield	3,0	w 1
6	2	3	Muthuvelu Rithvik	36	Hallfield	5,0	s 0

Buchholz means you add up the number in the "Pts." column.

Median-Buchholz means you disregard the opponent with the lowest score, and the highest score. So for this player, we remove the games against Russ (who scored the fewest points) and Muthuvelu (who scored the most points). By summing the other four opponents' scores, the Median-Buchholz score is  $3 + 3 + 4 + 3 = 13$ .

### 3. Buchholz Cut 1

Buchholz Cut 1 means that you use the Buchholz principle, but you cut the lowest score from the calculation. So for the player above, we remove the game against Russ (who scored the fewest points). By summing the other four opponents' scores, the Buchholz Cut 1 score is  $3 + 3 + 4 + 3 + 5 = 18$ .

#### 4. Buchholz

This is the sum of all of the opponents' scores, removing nothing from the calculation. For this player, the Buchholz score is  $3 + 1.5 + 3 + 4 + 3 + 5 = 19.5$ .

Again, there is a trick where you can just add the lowest-scoring opponent's score to the tie-break.

#### 5. Drawing of Lots

In the unlikely event of all of these tie-breaks being tied, then lots must be drawn.

#### Buchholz – A Caveat or Two

Suppose a player has this record:

Rd.	Bo.	SNo	Name	Rtg	Club/City	Pts.	Res.
1	3	18	Kitchen Bertie	0	Warwick Preparatory	0,0	s 1K
2	3	11	Dicen Elis Denele	0	St. Patrick's	4,0	s 1
3	2	30	Willoughby Rupert	0	Bilton Grange	3,0	w 1
4	4	9	Bateson Matthew	0	-	4,0	s 1
5	1	2	Shearsby Jude	68	Coventry Ca	6,0	w 0
6	2	4	Suthi Aaron	24	Hallfield	4,0	w 1

The K indicates that the player won by default in Round 1. Thus the game was unplayed. How are unplayed games handled for Buchholz?

FIDE introduced a "virtual opponent" concept in 2012, whose score is considered to be as if the player has the same number of points at the beginning of the round, and draws in all rounds subsequent to the unplayed game.

So in this case, the player's Round 1 opponent is considered to have scored 2.5, drawing in all of Rounds 2-6, having been on 0 before Round 1. That score gets discarded in Median-Buchholz and Buchholz Cut 1 in any case, because the next lowest score is 3. The rationale of this is to not unduly penalise a player on tie-break whose opponent hasn't turned up.

Let's look at another, more involved, example:

Rd.	Bo.	SNo	Name	Rtg	Club/City	Pts.	Res.
1	5	5	Kori Ananya	0	Worcestershire	3,0	s ½
2	6	9	Sargeant Jasmine	0	Norfolk	2,0	w 1
3	3	4	Khan Sana	0	Warwickshire	2,5	s 1K
4	2	2	Benhamida Jude	0	Cheshire	4,0	w 0
5	3	4	Khan Sana	0	Warwickshire	2,5	s 1
6	2	7	Omidvar Lara	0	South Wales	4,0	w 1

Here, the default came in Round 3. The player then played in all of the subsequent games.

In this tournament, in Round 3, these were the results on the top 3 boards:

Bo.	No.	Name	Rtg	Pts.	Result	Pts.	Name	Rtg	No.
1	7	Omidvar Lara	0	2	1 - 0	2	Tattersall Lily	0	18
2	11	Wiggett Sophie	0	2	0 - 1	1½	Pyun Lindsay	0	8
3	4	Khan Sana	0	1½	- - +	1½	Manchineni Maanvi	0	14

The virtual opponent in Round 3 has scored: 1.5 (the player's score, not the opponent's – OK, they are the same in this case, but they might not always be), plus assumed draws in Round 4, 5 and 6. So the Buchholz score for Round 3 is 3. Please note the difference, this is **NOT** the 2.5 shown in the table above. This is a particularly confusing case, because the two players played a game in Round 5! So if there are defaults mid-event, you cannot rely on the results table if you are calculating the tie-break manually – you need to consider this case.

So the Buchholz for this is  $3 + 2 + 3 + 4 + 2.5 + 4 = 18.5$ . Right? Alas, no...

Another type of unplayed game is a pairing-allocated bye. Two of the opponents had a pairing allocated bye:

Rd.	Bo.	SNo	Name	Rtg	Club/City	Pts.	Res.
1	5	14	Manchineni Maanvi	0	Northumberland	4,5	w ½
2	5	12	Zheng Kelly	0	Merseyside	2,5	s 0
3	7	3	Eccleston Bryony	0	Pennine	2,5	s 0
4	8	17	Scott Farrell	0	Teesside	2,0	w 1
5	8	15	Rowe-Simpson Emily	0	Teesside	2,5	s ½
6	9	-	bye	-		-	- 1

Rd.	Bo.	SNo	Name	Rtg	Club/City	Pts.	Res.
1	9	18	Tattersall Lily	0	Teesside	3,0	w 0
2	6	14	Manchineni Maanvi	0	Northumberland	4,5	s 0
3	8	15	Rowe-Simpson Emily	0	Teesside	2,5	w 1
4	7	16	Samra Jia	0	Warwickshire	2,0	s 0
5	9	-	bye	-		-	- 1
6	8	17	Scott Farrell	0	Teesside	2,0	w 0

Byes are also unplayed games, but they are treated differently for Buchholz calculation. They count as a draw for the purpose of their Buchholz score. As a result, their score needs to be reduced by 0.5.

So in the end, the Buchholz score is  $2.5 + 1.5 + 3 + 4 + 2.5 + 4 = 17.5$ .

From there you can see that the Median-Buchholz is 12, and the Buchholz Cut 1 is 13.5.