



Last Round Scoring by Bob Gruber

“We got 2 out of 2 cold tops on the last round. How come our percentage didn’t go up more? We were at 66.3% going into the last round. I thought we’d make it to 70%. Instead, we only went up to 67.1%! How can that be?”

Ever had those thoughts yourself? Are you still wondering: “How can that be?” If so, let’s see if we can shed some light on this mystery.

Weighting of the Last Round

First off, the last round is normally only 1 of 9 or 1 of 13 rounds. In the former case, the last round is $1/9$ (= 11.11%) of the total boards played. That means a tad under 89% of your score has already been “mostly” determined. We say “mostly” because, as the next section discusses, all boards are still in play and there may be some adjustments to your percentage on those boards.

In the latter case, the last round is even less significant. It is $1/13$ (= 7.69%) of the total boards played. Now, more than 92% of your score has already been “mostly” determined. The final 7.69% will not result in a giant change in your final score, several percent maximum.

If you’re not mathematically inclined (and probably even if you are), the prior two paragraphs with fractions and percentages don’t lend themselves to creating a clarifying picture in your mind. Another approach may be better.

Picture this: in a 9-round game, you’re playing the final 3 boards, each with a top of 8. That means 24 matchpoints are up for grabs. The prior 24 boards put 192 matchpoints up for grabs. 192 matchpoints “mostly” set—remember, those boards are still in play—24 matchpoints still to go.

For a 13-round game, you’re playing 2 boards with a top of 12 each, so again, 24 matchpoints are up for grabs. But this time, the prior 24 boards put 288 matchpoints up for grabs. Clearly, the last 2 boards won’t have that great an effect on your percentage.

All Boards Are in Play

Most people are well aware that the last round is some fraction of their total score. A more easily overlooked factor is that all prior boards are in play in the last round (games with $1/2$ table being a slight exception). So, it is very possible that your percent on each of the other boards will adjust. That adjustment may be up or down depending upon how the final pairs do on those boards. Whether you’re playing 9 rounds of 3 boards each or 13 rounds of 2 boards each, 24 boards will be in play at the other tables.

From your perspective, on each of those 24 boards, 1 additional matchpoint is at stake. If the players with your cards beat your score, you earn 0 additional matchpoints. If they tie your score, you get an additional $1/2$ matchpoint. If your score is better than theirs, you earn a full additional matchpoint. Bottom line, 24 matchpoints are yours for the taking (or losing) at your table and 24 matchpoints are out of your hands at the other tables. You could have a perfect last round, and in the unlikely event that your scores on all the prior boards were bested at all the other tables in play, you’ll have a 50%



final round showing. You won all 24 matchpoints at your table, but won 0 additional matchpoints at all the other tables; 24 out of a possible 48 is 50%.

The major point here is that only half the matchpoints being contested on the final round are at your table. The other half are at the other tables in play, where you have no control over the results.

A Specific Example

It's now time to put the prior 2 sections together in a specific example. Our example will be a 13-round game of 26 boards, each with a 12 top. However, after 12 of the 13 rounds, the top at that point is 11. To simplify the math, let's say you've averaged exactly 7 matchpoints per board for those 1st 12 boards. Let's further say you get 2 cold tops on your last 2 boards. How does this scenario play out for your round 12 and round 13 percentages?

Round 12's percentage will be fixed, but we can figure round 13's percentage in various ways, including the 3 below:

- a) Assume you earned 0 additional matchpoints (0%) on the other 24 boards in play,
- b) Assume your percentage on the other 24 boards in play remained the same,
- c) Assume you earned 24 additional matchpoints (100%) on the other 24 boards in play.

After round 12 your percentage was: $\frac{7 \times 24}{11 \times 24} \times 100 = (168 \div 264) \times 100 = 63.63\%$.

Bearing in mind that you had 168 matchpoints (mp) going into round 13 and that you earned 24 matchpoints at your table on the last 2 boards, we compute the post round 13 results as follows:

- a) Additional 0.0% (0.0 mp) at other tables: $(168 + 24 + 00) \div (12 \times 26) = 61.54\%$,
- b) Same % at other tables: $63.63\% \times \frac{24}{26} + 100\% \times \frac{2}{26} = 58.74\% + 7.69\% = 66.43\%$,
- c) Additional 100% (24 mp) at other tables: $(168 + 24 + 24) \div (12 \times 26) = 69.23\%$.

These percentages may be easier to see in tabular form. To recap, you completed round 12 winning 63.63% of the available matchpoints. In round 13, you scored all 24 available matchpoints at your table. The additional matchpoints you won at the other 12 tables varied according to the table below:

% of matchpoints won at other tables	game % after round 13	Differential in your game percentage
0	61.54	-2.09
63.63	66.43	+2.80
100	69.23	+5.60

Our example shows when you enter the last round with a high percentage, even if you win all the matchpoints at your table, your game can still go down by over 2%! Zounds! Even if you're lucky enough to win all 48 available matchpoints, your game only goes up 5.6% and you fall short of 70%.

It's a tough game, all right.