

Calculating shot allowances in 4-Ball Better Ball Matchplay.

In 4-ball better ball match play, the handicap allowance is 90% of the difference between the players' Course Handicaps, taken from the lowest player upwards. The player with the lowest handicap plays off zero, and the others receive strokes based on this 90% allowance.

Here's a breakdown of the process:

1. **Determine the Course Handicaps:** Each player's Course Handicap is determined based on their Handicap Index and the course's slope rating, as described in the World Handicap System (WHS) <https://blog.thesocialgolfer.com/whs-makesmajor-changes-to-golf-handicap-rules/> or similar resources.
2. **Find the Lowest Handicap:** Identify the player with the lowest Course Handicap in the group.
3. **Calculate the Differences:** Determine the difference in Course Handicaps between the lowest player and each of the other three players.
4. **Apply the 90% Allowance:** Multiply each of the differences by 90%.
5. **Round to the Nearest Whole Number:** Round the result to the nearest whole number to determine the number of strokes each player receives.
6. **Assign Strokes:** The player with the lowest handicap plays off zero, and the other players receive the calculated number of strokes.

Example:

Let's say in a 4-ball better ball match play, the players have Course Handicaps of 10, 14, 17, and 21.

1. Lowest Handicap: The player with a Course Handicap of 10 plays off zero.
2. Differences:
 - $14 - 10 = 4$
 - $17 - 10 = 7$
 - $21 - 10 = 11$
3. 90% Allowance:
 - $4 * 0.90 = 3.6$
 - $7 * 0.90 = 6.3$
 - $11 * 0.90 = 9.9$
4. Rounded Strokes:
 - Player with Course Handicap 14 receives 4 strokes (rounded up from 3.6)
 - Player with Course Handicap 17 receives 6 strokes (rounded down from 6.3)
 - Player with Course Handicap 21 receives 10 strokes (rounded up from 9.9)