Ambrose Golf Handicap Calculations:

It has been known for many years that the standard method of calculating the handicaps for 2, 3 and 4 person Ambrose events is not fair and especially fails when golfers on plus handicaps are playing in a team.

The standard and most common method used (and currently used by OneGolf/MiScore) is to divide the total handicaps for a 2 Person by 4 (2 x 2); for a 3 Person by 6 (3 x 2) and for a 4 Person Ambrose by 8 (4 x 2). i.e. divide by (# of players x 2).

Thus for a team with handicaps of 8; 16; 24 and 40 the team handicap is 11 (88/8). This is effectively the same as dividing each player's handicap by 8 and then adding them. For example, with this team it would be 8/8 = 1 + 16/8 = 2 + 24/8 = 3 + 40/8 = 5 for a total of 1+2+3 + 5 = 11.

In dividing by 8 for a 4 Person Ambrose it should be clear that as a player's handicap gets lower the amount they contribute in lost shots drops considerably to the point where a player who is off scratch (0) adds nothing as for the scratch golfer 0/8 = 0.

Part of the problem here though is that this calculation goes backwards when a plus handicapper is involved. When divided by 8 he/she does not lose strokes but instead **gains** strokes and therefore improves the overall handicap and provides an unfair advantage.

For example, a player on a plus 8 contributes +8/8 = +1. Effectively then a player on 8 is playing to 8/8 = 1 and a player on +8 is playing to +1. The difference is now effectivley only 2 strokes for players whose handicaps are 16 apart. That is, the overall handicap score of the whole team loses only 1 shot instead of 8 resulting in a 7 shot advantage. To clarify this, consider two teams with the following handicaps:

Team A with 0;16;16;16 and Team B with +8; 16;16;16. Team A's Ambrose handicap would be 6 and team B's would be 5. Yet Team B has a player with a far better handicap and could be expected to win most of the time even with a 1 shot less handicap.

Even without any plus golfers the difference can be significant. Consider Team C with 0,0,40,40 and Team D with 20,20,20,20. Both teams would be off 10 yet most would surely agree that Team C would win most of the time with two scratch golfers vs a team of 20 handicappers. Over 4 years ago **Denis Toohey** did a statistical analysis of the Ambrose handicapping calculations and then developed a much fairer method, which he called the 2e method.

This article in **Golf Digest** gives details of his research, etc: https://www.australiangolfdigest.com.au/a-score-to-settle/

The basic calculation with his method are:
4 Person Ambrose: 4 players: **40%A + 20%B + 10%C + 5%D** (total of 75%)
3 Person Ambrose: 3 players: **45%A + 20%B + 15%C** (total of 80%)
2 Person Ambrose: 2 players: **50%A + 35%B** (total of 85%)
where A to D represent low to high handicaps in order.

This method though does not fully address the issue of fairness with respect to plus handicaps but it certainly gets closer on all accounts. Consider the following scenarios:

Players				Methods	
A	**B**	**C**	**D**	**2e**	**1/8th**
-6	12	20	20	3	5.75
0	12	20	20	5.4	6.5
0	0	40	40	6	10
20	20	20	20	15	10

With the 1/8th method there is only a 0.75 difference between the team with a +6 vs the team with a 0 as the lowest handicap. This doesn't seem fair. The 2e method gives a difference of 2.4 which is getting closer to a fair comparison. Also, the difference of 9 (6 vs 15) for the other two teams with the same total handicap is clearly much fairer as well.

The whole object of handicaps is to give everyone some chance of winning.

In a 2 Person Ambrose the traditional method is to divide each player's handicap by 4. So, a 20 handicap goes down to 5; a 12 to 3 and a 2 to 1/2. That is, as you get closer to 0, your handicap reduces by much less until at 0 it does not go down at all. i.e. it stays at 0. But on a +6 the handicap goes to + 1.5, that is rather than stay the same as for a scratch golfer, a player on +6 gains 4 ½ shots.

The 2e method deals well with golfers over scratch, but it still fails to handle the issue of taking a fraction of a plus handicap.

My solution to this, that we currently use at the Gin Gin Golf Club, is that any golfer on scratch or better keeps his/her normal handicap. This still gives them something of an advantage as their handicap is not reduced at all, but on using this method on a few of our recent Ambrose events, it seems reasonably fair (as the plus golfer still needs to take some of the drives of the others in their team which does still handicap them in a significant way).

My personal experience before moving to Gin Gin and when playing with a friend who was a Plus Handicap golfer was that we won more than our fair share of competitions. My analysis of results at Gin Gin also reflects a similar outcome. Since using the modified 2e method though I believe the results have been fairer but may favour the higher handicaps a little.

Neither method though works well in open 'Charity Day' type events where non-handicap golfers may be assigned handicaps over 20 yet may actually be capable of playing to a single figure handicap and/or winning both long drive and nearest the pin comps against plus handicap golfers!

No method is fool-proof or perfect but after a year of using the Modified 2e method at Gin Gin I believe we are offering a more competitive and fairer calculation method. Would love to hear if any other clubs are using the 2e method or some variation of it. Also happy to have a discussion around this.

For those interested in the numbers the spreadsheet below shows the difference between our new modified 2e method and the old divide by 4 method from a Gin Gin competition early this year.

2 Person Ambrose					Old		New	New	Old	Old	Strokes
				2e	Divide by 4	GROSS	2E	Method	Divide by	Method	under lowest
Name	Handicap	Name2	Handicap	Calculation	Method	SCORE	Score	Winners	4 Result	Winners	Handicap (2e)
A	-6	A2	20	1	3.5	67	**66**		63.5	**1**	1
B	13	B2	36	19.1	12.25	77	**57.9**	**1**	64.75	**2**	-8
C	4	C2	5	3.75	2.25	68	**64.25**		65.75	**3**	-8
D	16	D2	16	13.6	8	74	**60.4**	**3**	66		-14
E	12	E2	15	11.25	6.75	74	**62.75**		67.25		-10
F	9	F2	11	8.35	5	73	**64.65**		68		-8
G	12	G2	21	13.35	8.25	79	**65.65**		70.75		-5
H	12	H2	15	11.25	6.75	78	**66.75**		71.25		-6
I	15	I2	25	16.25	10	84	**67.75**		74		-3
J	13	J2	22	14.2	8.75	84	**69.8**		75.25		-1
K	19	K2	19	16.15	9.5	85	**68.85**		75.5		-6
L	14	L2	15	12.25	7.25	83	**70.75**		75.75		-3
M	18	M2	40	23	14.5	82	**59**	**2**	67.5		-8

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