

# FACT Sheet



## How are points calculated in the FIFA/Coca-Cola World Ranking?

The basic logic of these calculations is simple: any team that does well in world football wins points which enable it to climb the world ranking.

A team's total number of points over a four-year period is determined by adding:

- the average number of points gained from matches during the past 12 months; and
- the average number of points gained from matches older than 12 months (depreciates yearly).

### Calculation of points for a single match

The number of **points** that can be won in a match depends on the following factors:

- Was the **match** won or drawn? (**M**)
- How **important** was the match (*ranging from a friendly match to a FIFA World Cup™ match*)? (**I**)
- How strong was the opposing **team** in terms of ranking position and the **confederation** to which they belong? (**T and C**)

These factors are brought together in the following formula to ascertain the total number of points (**P**).

$$P = M \times I \times T \times C$$

The following criteria apply to the calculation of points:

#### M: Points for match result

Teams gain 3 points for a victory, 1 point for a draw and 0 points for a defeat. In a penalty shoot-out, the winning team gains 2 points and the losing team gains 1 point.

#### I: Importance of match

Friendly match (including small competitions):	I = 1.0
FIFA World Cup™ qualifier or confederation-level qualifier:	I = 2.5
Confederation-level final competition or FIFA Confederations Cup:	I = 3.0
FIFA World Cup™ final competition:	I = 4.0

#### T: Strength of opposing team

The strength of the opponents is based on the formula: 200 – the ranking position of the opponents. As an exception to this formula, the team at the top of the ranking is always assigned the value 200 and the teams ranked 150<sup>th</sup> and below are assigned a minimum value of 50. The ranking position is taken from the opponents' ranking in the most recently published FIFA/Coca-Cola World Ranking.

#### C: Strength of confederation

When calculating matches between teams from different confederations, the mean value of the confederations to which the two competing teams belong is used. The strength of a confederation is calculated on the basis of the number of victories by that confederation at the last three FIFA World Cup™ competitions (see following page). Their values are as follows:

UEFA/CONMEBOL	1.00	CONCACAF	0.88
AFC/CAF	0.86	OFC	0.85

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## Calculation of the weighting factor for the confederations (C)

The weighting factor for the confederations is determined on the basis of the last three FIFA World Cup™ final competitions. The following calculation steps, which are set out in the table below, are performed:

- 1) The calculation is limited to interconfederation matches at the FIFA World Cup™ final competition concerned, i.e. matches between teams from the same confederation are excluded to avoid distortion of the results (row: "Total games").
- 2) The number of won and drawn interconfederation matches is determined for each confederation. A win is awarded one point and a draw is awarded half a point (row: "Win").
- 3) The average number of interconfederation matches won is calculated (row: "Av. per game"):
 
$$av_{Year\ x} = av.\ per\ game = win/total\ games$$
- 4) The average number of matches won during the last three FIFA World Cup™ final competitions is calculated (column "Av. 02-10"):
 
$$av_{02-10} = (av_{02} + av_{06} + av_{10})/3$$
- 5) The confederation weighting in comparison to the best confederation is calculated (column: "Weight").
 
$$weight_{Conf\ x} = \sqrt[4]{(av_{02-10}\ of\ Conf\ x)/av_{02-10}\ of\ best\ Conf}$$
 Additional conditions<sup>1</sup>:
  - a) If  $weight_{Conf\ x} < 0.85 \Rightarrow weight_{Conf\ x} = 0.85$
  - b) Confederations from which no teams have qualified for the FIFA World Cup™ finals (e.g. the OFC) are assigned the weighting of the weakest confederation.

		2002	2006	2010	2002 -2010	av 02-10	weight
	Game total	64	64	64	192		
	Interconfederal game total	54	47	53	154		
<b>UEFA</b>	total games	44	34	34	112		
	win	22.5	26	20	68.5		
	<b>av per game</b>	<b>0.51</b>	<b>0.76</b>	<b>0.59</b>	<b>1.86</b>	<b>0.62</b>	<b>1.00</b>
<b>CONMEBOL</b>	total games	20	17	24	61		
	win	12	10.5	16	38.5		
	<b>av per game</b>	<b>0.60</b>	<b>0.62</b>	<b>0.67</b>	<b>1.88</b>	<b>0.63</b>	<b>1.00</b>
<b>CONCACAF</b>	total games	10	13	11	34		
	win	5.5	2.5	4	12		
	<b>av per game</b>	<b>0.55</b>	<b>0.19</b>	<b>0.36</b>	<b>1.11</b>	<b>0.37</b>	<b>0.88</b>
<b>AFC</b>	total games	17	14	14	45		
	win	7	3.5	5	15.5		
	<b>av per game</b>	<b>0.41</b>	<b>0.25</b>	<b>0.36</b>	<b>1.02</b>	<b>0.34</b>	<b>0.86</b>
<b>CAF</b>	total games	17	16	20	53		
	win	7	4.5	6.5	18		
	<b>av per game</b>	<b>0.41</b>	<b>0.28</b>	<b>0.33</b>	<b>1.02</b>	<b>0.34</b>	<b>0.86</b>
<b>OFC</b>	total games	0	0	3	3		
	win	0	0	1.5	1.5		
	<b>av per game</b>	<b>0</b>	<b>0</b>	<b>0.5</b>	<b>0.5</b>	<b>0.17</b>	<b>(0.72)</b>

<sup>1</sup> Note: trial calculations for the new weighting factors showed that the "pure" differences between the confederations documented in the column "Av. 02-10" lead to a disproportionate devaluation of matches played by teams from weaker confederations. The differences between the confederations can be reduced by extracting the fourth root, which ensures that the confederation weighting only leads to a slight adjustment of the results. The first additional condition has a similar effect: the minimal confederation weighting of 0.85 ensures that top teams from a weaker confederation still have a chance of attaining a good position in the world ranking.

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## Example calculations

### Very high number of points from a FIFA World Cup™ final competition

	Spain	Switzerland
Date of match	16 June 2010	
Status of match	FIFA World Cup™ final competition	
Team	ESP	SUI
Result	0	1
Ranking position	2	18
Strength of confederation	1.00	1.00
M (points for <b>m</b> atch result)	0	3
I (importance of match)		4.0
T (strength of opposing <b>t</b> eam)	182	198
C (strength of <b>c</b> onfederation)		1.00
<b>P = M x I x T x C</b>	<b>0.0</b>	<b>2376</b>

### High number of points from a FIFA World Cup™ qualifier

	Uruguay	Argentina
Date of match	14 October 2009	
Status of match	FIFA World Cup qualifier	
Team	URU	ARG
Result	0	1
Ranking position	28	9
Strength of confederation	0.98	0.98
M (points for <b>m</b> atch result)	0	3
I (importance of match)		2.5
T (strength of opposing <b>t</b> eam)	191	172
C (strength of <b>c</b> onfederation)		0.98
<b>P = M x I x T x C</b>	<b>0.0</b>	<b>1264.2</b>

### Low number of points from a friendly match

	Egypt	Australia
Date of match	17 November 2010	
Status of match	Friendly	
Team	EGY	AUS
Result	3	0
Ranking position	10	20
Strength of confederation	0.86	0.86
M (points for <b>m</b> atch result)	3	0
I (importance of match)		1.0
T (strength of opposing <b>t</b> eam)	180	190
C (strength of <b>c</b> onfederation)		0.86
<b>P = M x I x T x C</b>	<b>464.4</b>	<b>0</b>

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## Points range (extreme values)

Points	Result
0.0	any lost match
42.5	draw in a friendly match between teams ranked 150 or below *
127.5	victory in a friendly match against a team ranked 150 or below *
600.0	victory in a friendly match against the top-ranked team °
1800.0	victory against the top-ranked team in the Confederations Cup or in a confederation-level final competition °
2400.0	victory against the top-ranked team during a FIFA World Cup™ final competition °

\* slightly more for teams from Europe/South America

° if the top-ranked team is from Europe/South America

## The average number of points from matches during the past 12 months

Examples:

Match	Team X		Team Y		Team Z	
1		150		230		500
2		0		340		430
3		230		0		-
4		1040		430		-
5		870		0		-
6		970		170		-
7		0		-		-
8		340		-		-
Total	8 matches	-	3,600 points	6 matches	-	1,170 points
Average		<b>450</b>		<b>195</b>		<b>465</b>

A team only gets the full average if it has played at least 5 matches.

4 matches:  $P_{tot} = 0.8 * P_{average}$  (=80% of average)

3 matches:  $P_{tot} = 0.6 * P_{average}$  (=60% of average)

2 matches:  $P_{tot} = 0.4 * P_{average}$  (=40% of average)

1 match:  $P_{tot} = 0.2 * P_{average}$  (=20% of average)

## The average number of points gained from matches older than 12 months

Four years, covering one World Cup cycle, are taken into account. Matches older than 12 months within this four-year period depreciate blockwise on a yearly basis:

Match average from past 12 months: 100%

Match average from previous year: 50%

Match average from year 3: 30%

Match average from year 4: 20%

Matches older than 4 years: 0% (deleted)

The more years you take into account, the more past efforts count and the more stable the ranking becomes.