Sainte Laguë Formula Explained

Electorate Seats

The MP for an electoral district is the candidate who wins more votes than any other candidate. He or she does not need to win more than half the votes cast. Under the MMP electoral system MPs for the electoral districts are elected in exactly the same way as they would be under the First-Past-The-Post (FPP) electoral system.

Party List Seats

The number of party votes won by each registered party which has submitted a Party List is used to decide how many seats overall each party will have in Parliament.

If, for example, the party vote for the Grandstand Party entitled it to a total of 54 seats in Parliament and it won 40 electorate candidate seats, it would gain 14 further seats which would be drawn from the Party List of the Grandstand Party. Candidates may stand for Parliament both in an electoral district and on their Party's List. As a result, the first 14 candidates on the Grandstand Party's rank-ordered Party List who had not been elected to Parliament to represent an electoral district would be declared elected as Party List MPs.

A procedure, known as the Sainte Laguë formula (after its founder) is used to decide the order in which political parties are awarded seats in Parliament.

Allocating 2020 General Election Parliamentary Seats using the Sainte-Laguë Formula

To determine the precise order in which all the seats in Parliament are allocated to the various political parties, the Electoral Act 1993 prescribes that a mathematical formula, called the Sainte-Laguë formula, be applied. The nationwide party vote of each of the parties which qualified for representation in Parliament is divided by successive odd numbers starting with 1 (i.e. the party votes divided by 1, 3, 5, 7, 9, 11, 13, etc). The 120 highest numbers (which are called quotients) determine both the number of seats for each party and the order in which they are allocated. The following explains how the process works:

Step 1:

The Electoral Commission draws up a table showing the name of each party shown on the party side of the ballot paper, the number of party votes it won, the percentage of all party votes it won and the number of electorate seats it won. For the purposes of this explanation minor parties are combined under the heading 'OTHER'.

Registered Parties	LABOUR PARTY	NATIONAL PARTY	GREEN PARTY	ACT NEW ZEALAND	NEW ZEALAND FIRST PARTY	THE OPPORTUNITIES PARTY (TOP)	NEW CONSERVATIVE	MĀORI PARTY	ADVANCE NZ	OTHER	TOTA
Party Votes	1,443,545	738,275	226,757	219,031	75,020	43,449	42,613	33,630	28,429	35,671	2,886,
% of all party votes	50.01%	25.58%	7.86%	7.59%	2.60%	1.51%	1.48%	1.17%	0.98%	1.24%	100.0
Number of electorate seats won	46	23	1	1	0	0	0	1	0		

Step 2:

The Electoral Commission then excludes parties that are not eligible for Party List seats by deleting any party that has not won at least 5% of the total number of party votes and has not won at least one electorate seat (commonly termed the threshold). Although the Māori Party gained less than 5% of the party votes they did win an electorate seat, so are included.

Registered Parties that gained 5% of total party votes or won at least 1 electorate seat	LABOUR PARTY	NATIONAL PARTY	GREEN PARTY	ACT NEW ZEALAND	MĀORI PARTY	TOTAL
Party Votes	1,443,545	738,275	226,757	219,031	33,630	2,661,238
% of all party votes	54.24%	27.74%	8.52%	8.23%	1.26%	100.00%
Number of electorate seats won	46	23	1	1	1	72

Note: Because the parties not reaching the threshold have been disregarded the percentage share for each of the remaining parties has increased.