

Election results

Counting Senate votes

Counting Senate votes starts at 6pm when the polling place closes to the public. However, the likely result is not usually known on the night and can take weeks to finalise.

Each state or territory elects multiple senators. To be elected, a candidate needs to win a quota — a set proportion of the electorate's votes. This is known as proportional representation.

$$\text{Quota} = \frac{\text{Number of formal votes}}{\text{Number of vacancies} + 1} + 1$$

The quota is worked out by dividing the total number of formal ballot papers by one more than the number of vacancies to be filled (ignore any remainder) and then adding 1 to the result.

An example of counting Senate votes

There are two Senate seats vacant. There are 3 000 formal votes in the 'territory'. The polling officials work out the quota:

$$\text{Quota} = \frac{3\ 000}{2 + 1} + 1 = 1\ 001$$

Next the first preference votes are counted for each candidate.

| | |
|--------------------|-------|
| Kai | 200 |
| Kim | 1 250 |
| Jade | 350 |
| Amir | 950 |
| Alexis | 250 |
| Total votes | 3 000 |

Kim has 1 250 first preference votes. She has more than the quota and is elected to the Senate.

The 249 votes she received over the quota are called 'surplus votes'. These are transferred to the remaining candidates by distributing all Kim's votes at less than their full value (the transfer value).

The transfer value is worked out by dividing the number of surplus votes by the total number of ballot papers the elected candidate received.

The second preferences from all of Kim's 1 250 votes are counted.

| | |
|--------------------|-------|
| Kai | 400 |
| Jade | 150 |
| Amir | 500 |
| Alexis | 200 |
| Total votes | 1 250 |

The second preferences from Kim's ballot papers are multiplied by their transfer value (decimal remainders are disregarded) and then added to the first preference totals for each candidate.

$$\frac{\text{Number of surplus votes}}{\text{Total number of Kim's 1st preference votes}} = \frac{249}{1\ 250}$$

$$\text{Transfer value} = 0.1992$$

| | No transferred votes x transfer value | = | Transfer votes | + | 1st Preference votes | = | New Total votes |
|---------------|---------------------------------------|---|----------------|---|----------------------|---|-----------------|
| Kai | 400 x 0.1992 | = | 79 | + | 200 | = | 279 |
| Jade | 150 x 0.1992 | = | 29 | + | 350 | = | 379 |
| Amir | 500 x 0.1992 | = | 99 | + | 950 | = | 1 049 |
| Alexis | 200 x 0.1992 | = | 39 | + | 250 | = | 289 |

Now Amir also has more than 1 001 votes (a quota) so the two Senate vacancies have been filled.

If all the vacancies have not been filled after all the surplus votes have been transferred, the candidate with the lowest number of votes is excluded. The excluded candidate's ballot papers are distributed at full value to their next preference from the remaining candidates. The distribution of preferences from excluded candidates continues until the required number of senators is elected.