Single Transferable Vote
Manual Counting Procedure for Small Groups

1. Sort all the ballots by first preference and count each pile, setting aside any invalid ballots.

2. Determine the total valid vote by adding the first-count piles. Divide the total valid votes by the number of candidates to be elected plus one. Discard any fractional remainder and add one. This is the Quota.

3. If no candidates have achieved the Quota, go to step 8.

4. If one or more candidates has achieved Quota, declare the candidate with the largest count to be elected.

5. If, at any time, the number of candidates remaining is equal to the number of candidates to be elected, declare all those candidates elected. If, at any time, the necessary number of candidates has been elected, the counting is over.

6. If there are more candidates to be elected, transfer the surplus ballots as follows:

> 6.1 Subtract the Quota from the candidate's total count, and divide this Surplus by the candidate's total count.
>
> 6.2 Write this Weighting Factor at the top of every ballot in all the elected candidate's piles.
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> (Once the Weighting Factor has been recorded on the ballot, the ballot can be moved around at will. It doesn't matter where it came from.)
>
> (For example, if a candidate gets ten votes and the Quota is eight, then the Surplus is two and the Weighting Factor is 2/10 = .2. Write ".2" on the top of each ballot. Each of these ballots is now counted as 1/5 of a vote in subsequent counting, and all of them together, wherever they are, count as 10 X .2 = 2 votes, which is the Surplus to be transferred.)
>
> 6.3 The value of any ballot at any moment is equal to the product of all the Weighting Factors written on it.
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> (For example, if one of the ballots in the example above is transferred again and acquires a further Weighting Factor of, let us say, .16, then write ".16" on the top of the ballot beside the ".2". This ballot is now counted as .2 X .16 = .032 votes.)
>
> 6.4 Keep ballots of equal weight together in separate piles for each candidate to facilitate counting.
>
> (That is, keep the ".2 X .16"s separate from the ".2"s and the ".16"s. If you have six ballots for one candidate all weighted ".2 X .16", then together they are worth 6 X .2 X .16 = .192 votes.)
>
> 6.5 Distribute these ballots to the next available preference and add them to that candidate's count. Set aside any exhausted ballots without changing the Quota.

7. If there are more candidates who have achieved a Quota, go to step 4.

8. When there are no more candidates who have reached Quota, eliminate the candidate with the lowest count and distribute their ballots to the next available preference, without changing the Weighting Factors. Check Step 5. Go to Step 3.