CHAPTER 4

CONCLUSION

In this research, we have found the number of ways may be counted the ballots of candidate A receives n votes and candidate B receives $(n-k)$ votes so that candidate A is always ahead of candidate B, and candidate A is always ahead of candidate B at least r votes.
We conclude the main results:

Theorem 3.2.1 In an election, if candidate A receives n votes and candidate B receives $(n-k)$ votes then number of ways may the ballots be counted so that candidate A is always ahead of candidate B is

$$\frac{k}{n}\binom{2n-k-1}{n-1},$$

where $k \leq n$ are positive integer.

Theorem 3.2.2 In an election, if candidate A receives n votes and candidate B receives $(n-k)$ votes then number of ways may the ballots be counted so that candidate A is always ahead of candidate B at least r votes is

$$\frac{(k-r+1)}{(n-r+1)}\binom{2n-k-r}{n-r},$$

where $r \leq k \leq n$ are positive integer.