## Political reduction of the lower and upper bounds on the number of persons

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#### Abstract

In this paper, I describe the political reduction of the lower and upper bounds on the number of persons.

The paper ends with "The End"

### Introduction

In a previous paper, I've described how the lower bound on the number of persons is 4 and the upper bound on the number of persons is 160.

Contrary to popular belief, political reduction of the lower and upper bounds on the number of persons is possible due to political affiliation.

In this paper, I describe the political reduction of the lower and upper bounds on the number of persons.

## Political reduction of the lower bound on the number of persons

Since any political party is aligned either left, center or right, we have 3 possible **political affiliations** for the 4 persons. Since there must be at least 1 person for each affiliation, the remaining 1 person is eliminated to reduce the lower bound on the number of persons to 3.

# Political reduction of the upper bound on the number of persons

Since any political party is aligned either left, center or right, we have 3 possible **political affiliations** for the 160 persons. By the **pigeonhole principle**, there must be at least 53 persons for each political affiliation, and the remaining 1 person is eliminated to reduce the upper bound on the number of persons to 159. Applying this tripartite method recursively to the quotients 53, 17 and 5, the remaining 2, 2 and 2 persons respectively are eliminated to reduce the upper bound on the number of persons to 153.

## The End