# Calculations of the number of stars on celestial sphere

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#### INTRODUCTION

From time immemorial ancient people looked at the sky and wanted to know how much stars are there in the sky. Thus our work, the results of which are presented below, is related to more than topical problem (see e.g. [1]).

Actually, here there should be your own introduction.

#### THE METHOD OF CALCULATIONS

For our calculations we used the following formula

$$N_{tot} = N_S + N_N, \tag{1}$$

where  $N_{tot}$ ,  $N_S$  and  $N_N$  are the total number of stars, the numbers of stars we can see and the number of stars we have never seen correspondingly.

As we could not calculate the stars we had never seen we decided to calculate only the stars visible for us [3]. Thus our formula (1) gives us only the lower limit of all the stars, as was mentioned in [2].

We also tried to identify some stars. Firstly, we used the ancient map (see Fig. 1), but did not succeed. Hence we decided to use the modern one, shown in Fig. 2 and successfully identified several stars (see Table 1).



Fig. 1: The ancient sky map.

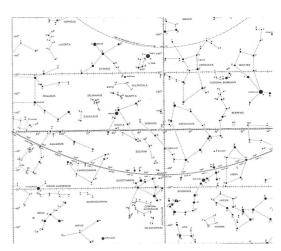


Fig. 2: The modern sky map.

Table 1: The characteristics of some identified stars.

name	$\operatorname{color}$	${ m brightness}$
star 1	$\operatorname{red}$	very bright
$\operatorname{star} 2$	green	$\operatorname{bright}$
star 3	yellow	not so bright

## RESULTS AND CONCLUSIONS

As we have no time and possibility to calculate even the stars we can see, and one of us felt asleep just after the midnight, we can conclude, that the number of stars is very big.

## ACKNOWLEDGEMENT

We would like to thank the nature for sending us down the cloudless sky and our friend, who made coffee for us.

## REFERENCES

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