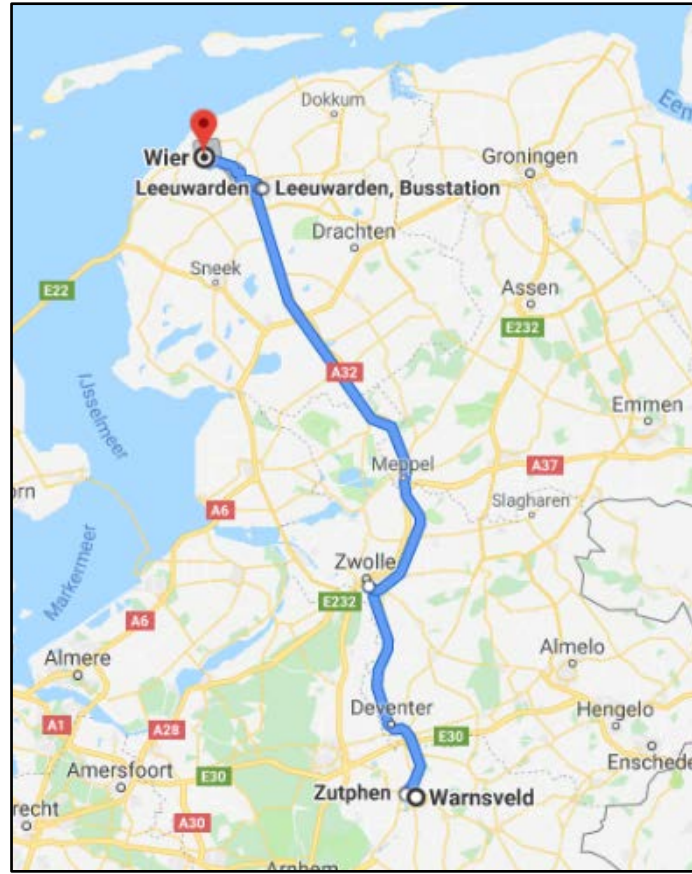


The middle of somewhere



Preliminary round Alympiad November 22, 2019

Colophon

The Mathematics Olympiad (Wiskunde Olympiade) is an initiative of the Freudenthal Institute, Utrecht University. The Olympiad committee is responsible for the organisation of the Olympiad and for producing the assignment. The committee members are:

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Guide for the preliminary round assignment for the 2019/2020 Mathematics Olympiad

This Mathematics Olympiad assignment consists of four assignments with a total of eleven problems. The initial three assignments are a run-up to the final assignment: all knowledge and insights from these assignments can be applied in the final assignment.

General advice for working on this assignment:

- First read the full text of the assignment so you will know what you have to do.
- Keep an eye on the time you spend on the first three assignments; take plenty of time for the final assignment, at least three hours.
- If you divide up tasks within your team, discuss the results with each other after every assignment.
- If you change certain approaches, methods or procedures while working on the assignments, describe your changes in your report and include why you made them.
- It will be a good idea to have internet available during this assignment. An atlas may also be of use.
- List the (internet) sources that you will use.

Handing in:

- The final assignment
- The three previous assignments, possibly as attachments

When you hand in your work, the jury will receive a digital copy. If you have any appendices with your work, hand in everything in a zipped folder. Include the name of your school *and* your own names in the file name.

Judging:

These are some of the points that may be considered by the jury:

- Legibility and clarity of the final assignment;
- How complete the work is;
- The use of maths;
- The argumentation used and justifications of choices that have been made;
- The depth to which the various assignments have been answered;
- Presentation: form, legibility, structure, use and function of illustrations;
- (Mathematical) creativity in your elaboration of the assignments.

Have fun and good luck!