



# AUENLAND ADVENTURE RACE

## Introduction to orienteering

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# 1. Introduction

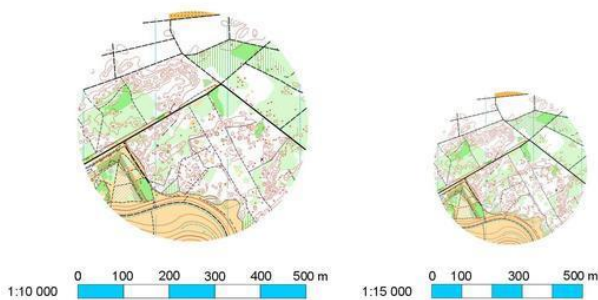
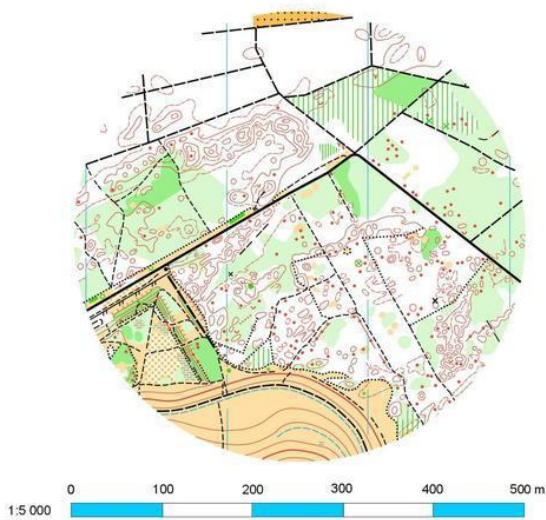
The Auenland Adventure Race has been organized for many years now by Campingplatz Auenland and Team Leopard Adventure Racing. The race is known for being beautiful, challenging, fun and well organized. Check [www.auenlandadventurerace.de](http://www.auenlandadventurerace.de) for more information on the race. The organization puts a lot of effort in creating a variety of orienteering challenges, while avoiding making a puzzle race. This short introduction on the orienteering in the Auenland Adventure Race will give you some information on the most important orienteering forms you can encounter in the race and give you some advice on how to cope with these challenges. Remember, it's not about going fast, it's about going fast in the right direction! Happy racing!

For more detailed information and exercises see <http://hamok.be/techniek/orientatielopen/> (in Dutch) or <http://o-training.net/w/> (in English).

## 2. The scale of the map/picture

The scale translates distances on the map to those in the terrain. Important scales you can encounter are:

- scale 1:10.000 (1cm is 100m)
- scale 1:15.000 (1cm is 150m)
- scale 1:5.000 (1cm is 50m)



*Tip: Say out loud what the scale of the map is when you start with a new map.*

### 3. Keep your map oriented



Your first action is always to make sure your map is oriented! Most of the time you can orienteer your map with the use of objects in the area. Find the objects on the map and turn until your map fits the surrounding. A map is well oriented when you see in front of you what you see on the map. When you look at the map, the things you see on your left are also on your left in the surrounding.



The main reason to have a compass on you is to orienteer yourself and your map. That means to know what the direction of north is. To orienteer your map, you turn your map until the magnetic needle of the compass turns in the same direction as the north of the map (most of the time the top of the map if not indicated otherwise).



*Tip: Keep your map oriented at all times.*

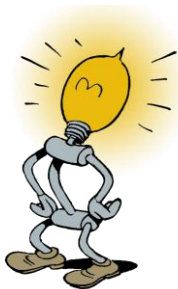
## 4. Staying in contact with the map



Keep your compass on the map so you can keep the map oriented. With your thumb or the angle of the compass you can follow your position on the chosen way. Compare constantly your map with the area. Find objects in the area and check if you find them on the map.



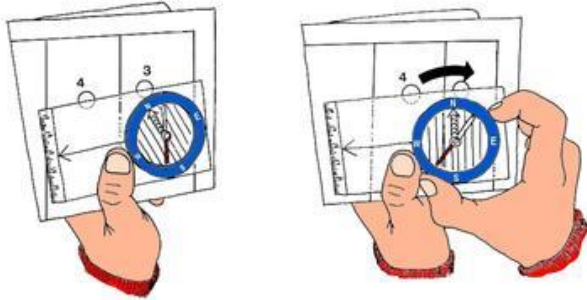
Fold the map so you can keep it easily in your hand and keep your thumb on the place you are on the map while keeping the map oriented.



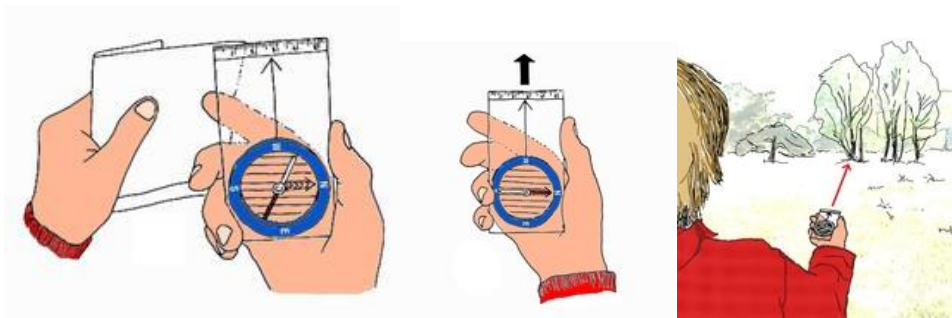
*Tip: Know in advance  
what you will meet  
according to the map*

## 5. Use of the compass

In addition to using it to orienteer your map, you can also use a compass to follow a direction. The 1-2-3 method with the plate compass is especially developed to do so.



1. Lay a side of the compass along the line you want to know the direction of, directed to your target (for example you want to go from post 3 to 4 in the example above).
2. Turn the compass house until the north line on the compass points in the direction of the north lines on the map.
3. Take the compass of the map and turn it until the north line on the compass directs in the same direction as the magnetic north needle of the compass. The direction you have to go to is now pointed out by the arrow on the front of your compass. Stay behind your compass, look over it and find an object in front of you. Go to that object and repeat this until you have reached your target.



The method mentioned above is used to get a direction from the map onto the compass (from map to compass). You can also work the other way around (from compass to map). Often this method is used to find your position on the map. Step 1: put the direction on to the compass. Step 2: Put the direction onto the map. Use the map to go to the target.



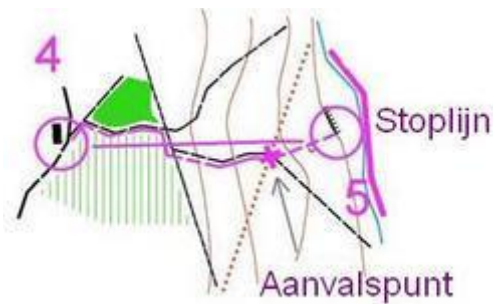
*Tip: It is important to be fast, but more important to be precise!*

## 6. Attack point and stopping line

An attack point is an object near your target that is easy to find. From the attack point you attack the target. This method is used when the orienteering gets more difficult and the targets are well hidden. An attack point can be a junction, a house, a rock etc.



On the example above the good attack points are marked with the arrow. The other points are not clear enough.



It is wise to also look for a linear and easily recognisable element behind your target to know when you are too far and so missed your target. This is a stopping line, a line that you should not cross.

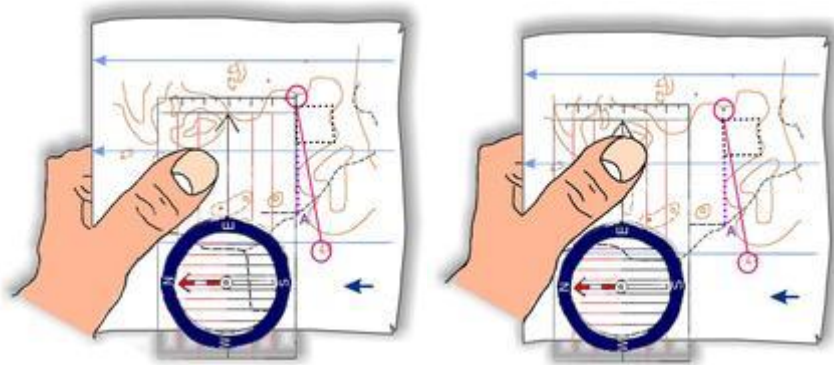


*Tip: Choose attack points and stopping lines that are easily recognisable in the field.*

## 7. Running/cycling on the needle

When the orienteering gets more difficult, the need for using the compass will increase. That does not mean you constantly need to take a compass bearing, it would take too long, and it is not necessary. You need to have a rough estimate of your direction for example to be able to cross a forest. You do this by using your compass to keep you in the right direction. This is called running on the needle.

This technic is used alongside other methods like following natural objects like the corner of a forest or contour lines.



With a normal compass you do orienteer roughly by placing your compass on the map with the top of the compass pointing in the direction you want to go to. Make sure you keep the direction of the magnetic needle in the direction of the north side of the map (see example above). By doing so your map is constantly oriented and your direction is straight ahead.



*Tip: A thumb compass is very suitable for rough orienteering.*

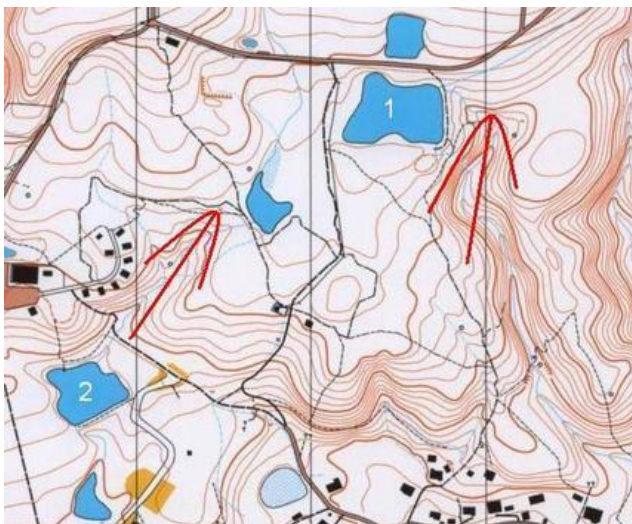


## 8. Contour lines

Contour lines show the height of the area on maps and give a lot of useful information. Rivers and creeks are always in a valley, a lake can be high on a mountain. The closer the contour lines lay together the steeper it is.

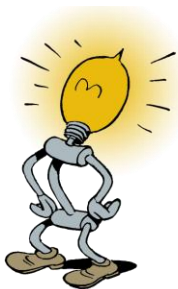
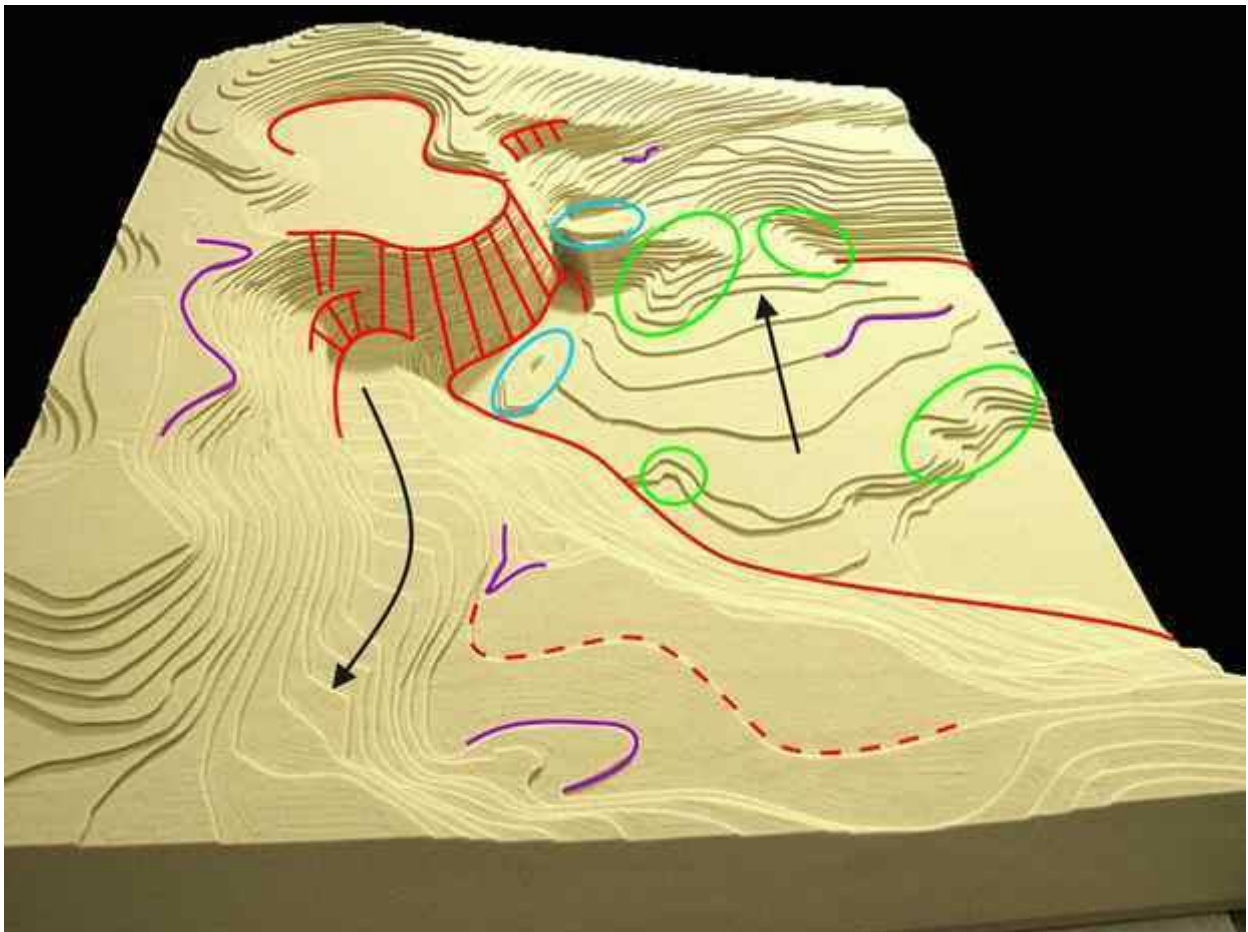


From the hilltop small creeks often run to a river. Creeks and rivers cause erosion on hillsides. Therefore, contour lines usually make a U-turn around a creek on the map. The closed side of the U-turn therefore points in the direction of the top. This makes it easier to understand the map, for example lake 1 above lake 2 on the map below.



When contour lines turn sharply, they are often easily recognisable in the area. These striking points are often used to place checkpoint on (see purple lines on the figure below). When two or more contour lines have the same form, you get a striking point that is easy to find. You can use these points as attacking point or stopping lines. The green lines on the map below show examples.

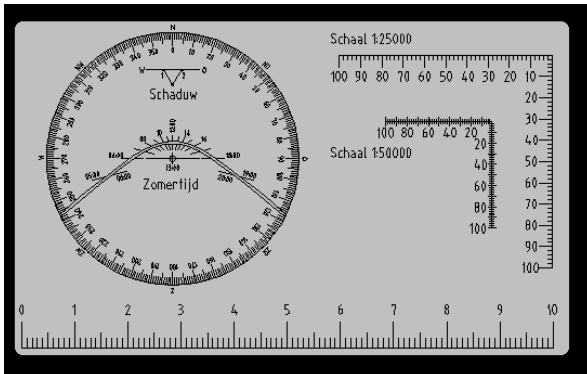
Small hill tops are most of the time easy to be seen. In flat land they are often the striking points to look for. The blue lines on the map below show examples. Wide curves in contour lines however, are often difficult to follow. The dotted lines on the map below show examples.



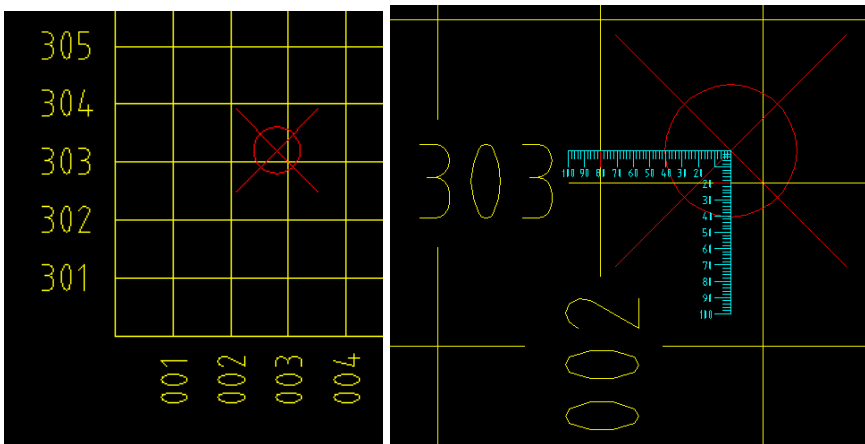
*Tip: Contour lines show the steepness of a route, important to estimate your speed!*

## 9. Draw in coordinates

The organization can challenge you by giving you coordinates so you have to draw in the map yourself. When standard scales are being used, it is often easy to use a map protractor as shown below. The Auenland AR does not make use of standard scales so you need to estimate.



First, find the square where the target is in. In the example below 002 horizontal and 303 vertical define the square where the target is in. The square is called 002.00 – 303.00 (always horizontal first and vertical second).



Now you can estimate, calculate (or use if possible, the map protractor) to define the target within the square. In the example the target in the square is 80 horizontal and 20 vertical. So, the point has the following map coordinate (MC) 002.80 – 303.20



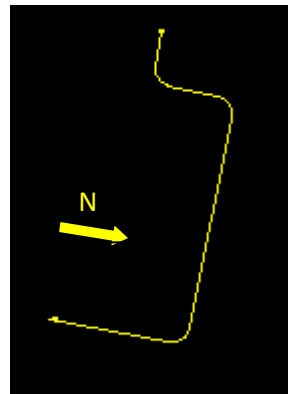
*Tip: This needs to be done very precise. Use your team, one can draw, the other can read*

## 10. Transparant overlay (oleaat)

An oleaat is a plastic transparent overlay that you can lay over your map by putting a striking point on the transparent overlay onto the corresponding striking points on the map. Next, you can take the extra information the oleaat shows over onto your map. Often the oleaat shows where the checkpoints are or a certain route you must follow (see the blind line below).

## 11. Blind line

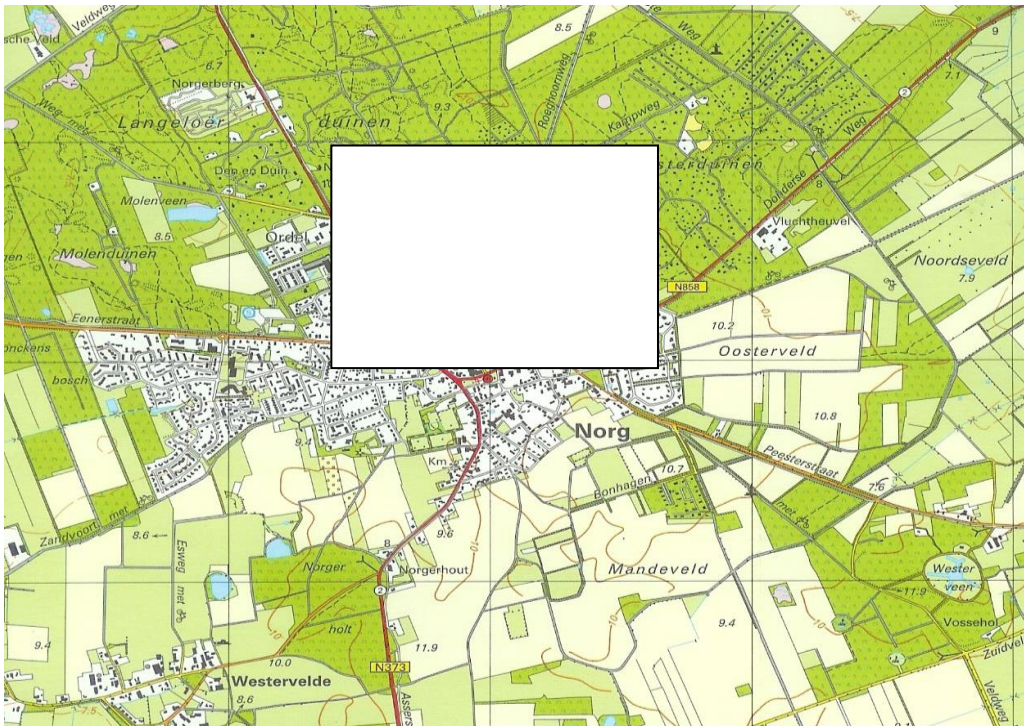
A blind line shows exactly the direction and distance of your route, without the context of a map. It most often follows roads. When drawn on an Oleaat you can take it onto your map. When you need to run on it (as is often the case in the Auenland Adventure Race) it also needs to show the scale and the north arrow. See the example below.



*Tip: Keep well track of your walking distance by counting steps in the correct direction. 40 steps (only count left or right leg) are usually about 100m. Make sure you know what your step length is.*

## 12. Blind spot

The race organization can challenge you by making a part of the map blinded. In this situation it is important to use the information that you can see and look for elements that can't have disappeared under the blind spot. For example, roads and rivers usually don't stop at the edge of the blind spot. You need to keep track of your direction and distance and define an attack point and stopping line.

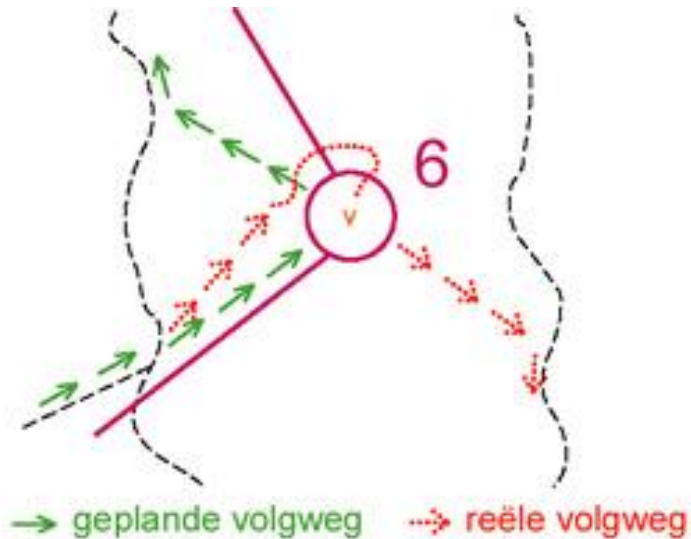


*Tip: use your compass  
and orienteer by the  
needle.*

## 13. Making mistakes

Everybody makes mistakes, especially when the lack of sleep or tiredness starts to impair your brain. Making mistakes is annoying and discouraging but the challenge is to keep on being able to analyse your mistake and correct it.

A very common mistake is the **90° of 180° mistake**. It is often made when not paying attention after running away from a checkpoint. For example, you needed to turn left after finding it. However, you did not find the checkpoint at the first approach and after searching around you finally found it. Upset by the loss of time you want to make up and turn left without realising you came from a different angle on your final approach of the checkpoint. The consequence is that you go in the wrong direction.



*Tip: always check your direction while leaving a checkpoint. A wrist or thumb compass makes this easier.*

## 14. Last but not least

Some final tips and suggestions based on our experience:

- Counting steps helps to prevent mistakes.
- Regularly check if the road you are on is in the direction you expect it to be.
- Orienteer from rough to detailed, to avoid standing still too long.
- Check your direction on your compass after leaving a checkpoint.
- Finding the first checkpoint is important to get you into the race.
- Be aware that after finding the first 10 checkpoints without any problems often makes you careless.
- Adventure racing is first about orienteering (finding the right way and staying on it) and second about speed.
- Do not let yourself be distracted by other teams (follow your own plan) but make use of them.
- Don't forget to enjoy the surrounding. Adventure racing should be fun.

Especially for the Auenland Adventure Race:

- The scales of the maps are most of the time not standard.
- You cannot count on black (road) lines on the map. Especially on the bike and at night it is more secure to basically navigate on the white (road) lines.