## GS \#75 - Asterix en Obelix: In Search of Idefix

Both tours are of about the same length, between 22 km (Obelix) and 25 km (Asterix); both have to get over an elevation gain of between 422 m and 451 m . When I accompanied the two Gauls they spent about one and a half hours. But be aware that you'll need additional time to figure out the numbers you will be searching for and to calculate the coordinates of the waypoints. Moreover, in most instances you won't need exactly the same time as your partner to reach the next waypoint; the greatest difference of distance is $2,4 \mathrm{~km}$ vs. $1,1 \mathrm{~km}$ between WP 10 and WP 11. For information: The beta testers spent about three hours before reaching the meeting point. After that you'll cycle together and cover some more kilometers before you'll have to walk the last some hundred meters to the cache location. The stash is situated at about $7,5 \mathrm{~km}$ (as the crow flies) from the starting point. If you afterwards play the bonus cache as well which is hidden more or less on the way back to Aachen and return to Lousberg you'll have to make some 40 km . As you see, this is no cache for you if you are in a hurry. Slow down, enjoy the marvellous landscape and take a book with you to read some pages while waiting for your partner. Perhaps a comic strip by Goscinny/Uderzo? Even better: Don't go for it the two of you, but try it at least with four people, two in each party; that should be more entertaining on the way.

If you use a mobile phone you'll be able not just to communicate the respective results but also a picture of the situation on site; consequently, both parties will be able to do the calculation. Some sort of check might be useful before you set off for a mystery tour.

Mind the following rules:
Each partner has to find out at each of his own waypoints five numbers $(\mathbf{m})$ to $(\mathbf{q})$ which are necessary to calculate the following waypoint of his partner. In return, he will receive from him the coordinates of his own following waypoint. The coordinates are always of the form A(sterix)/O(belix) - number of the waypoint - N 504 (respectively 5) a.bcd E 0060 e.fgh. Attention: Of course Asterix will always get to know the coordinates of the WP Obelix ( X ) at WP Asterix ( $\mathrm{X}-1$ ). In order not to lengthen the listing text even more I have put down the formulae to calculate (a) to (h) in the excel sheet linked here (Excel-Tabelle). The background in different colours may help you not to get lost. As an additional help l've given you check sums for the calculation of (m) to (q). Print out the sheet before starting your trip or - even better - fill in the digitalized version (digitalisierte Version) on site - so you won't have to make complicated calculations on your way.

In order to calculate the cache location you'll further need to determine at each waypoint a number A respectively $\mathbf{O}$, i. e. one of the numbers $(\mathbf{m})$ to $(\mathbf{q})$ the sums of which result in $\mathbf{x}$ and $\mathbf{y}$. In the excel sheets and in the listing text I have marked the respective numbers in red.

I think it's not necessary to translate the complete description of every single waypoint into English; in the following just some of the more complicated ones:

WP 01/WP 02 (A): three years, in chronological order.

WP 03 (O): If you are strong $m$ is the first letter, $n$ the fifth and o the eigth; wise men choose $p$ as the fifth; meanwhile it would be just if $q$ were the eigth.

RP A 01: please turn right here.
WP 06 (O): Attention: Use only the green and white pictograms.
RP O 01: please turn right here to the woods.

At the meeting point, Asterix and Obelix are very glad about seeing each other again. But soon they become quite upset: It's a pity; neither of them has come upon any firm lead of Idefix. But in the village where they have stranded they meet friendly people. It seems to be quite a likeable tribe that lives here! Two of the indigenous are just coming back from their work in the fields. They have a hint for our friends. Each of them saw a lamb bone half hidden in quite an unusual place, namely here:

> RP Idefix 01:
> N $504 x^{*} y+(p)(q)(o)(o) E 0055 x^{*} x+(p)(p)(m-q)(o)$
> RP Idefix 02:
> N $504 x^{*} y+(n-p)(o)(m-p) E 0055 x^{*} x+(p)(n-m+q)(o)(p+q)$
where ( $\mathbf{m}$ ) to ( $\mathbf{q}$ ) are the results of WP Asterix/Obelix 15. Please don't multiply the results in the square brackets.

Asterix and Obelix are getting off. It's their last chance. If you want to help them, please hold in mind that you can find the Gallic dog at

$$
\begin{aligned}
& \text { N } 504 \text { s.tuv } \\
& \text { E } 0055 \text { w.xyz. }
\end{aligned}
$$

You'll get to know the results $(\mathbf{s})$ tot $(z)$ at the reference points Idefix 01 and Idefix 02.

With the help of the checker you can verify the coordinates of both RPs and of the cache location itself.

