Solving Puzzle Caches

The Not-So-Definitive Guide

Puzzle Caches - The Rules

- The posted coordinates are usually bogus coordinates
- Must solve a puzzle on the cache page to get the coordinates
- All clues needed to solve the puzzle must be on the cache page
- All the information to solve the puzzle must be publicly available
- The final cannot be more than 2 miles (3.2 kilometers) from the posted coordinates

Posted Coordinates

• The posted coordinates are usually bogus coordinates

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• There is no soup at this location...

Posted Coordinates

- The posted coordinates are usually bogus coordinates
- The final cannot be more than 2 miles (3.2 kilometers) from the posted coordinates
- This already gives us much of the final coordinates

Example Posted Coordinates

- E.g. S 27° 19.088 E 153° 02.282
- 2 miles

North:	S27° 17.345' E153° 02.282'
South:	S27° 20.831' E153° 02.282'
East:	S27° 19.088' E153° 04.233'
West:	S27° 19.088' E153° 00.331'

• **S27** [17-20].??? **E153 0**[0-4].???

GV2020-85				
A cache by GeoVenture2020 = A cache by GeoVenture2020 A cache by GeoVenture2020				
Difficulty: ******* Terrain: ****	Size: •••••• (micro)	♥ 0 Favorites ▼		
S 37° 34.989 E 140° 21.543 UTM: 54H E 443408 N 5840240		n South Australia, Australia 645.8 km from your home location		

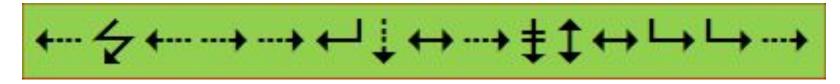


• This is probably some sort of code... but I could not find it!

$$\underbrace{ \longleftrightarrow } \underbrace{ \longleftrightarrow }$$

- Lets see what we can do without knowing!
- 15 symbols long
- S ?? ??.??? E ??? ??.???

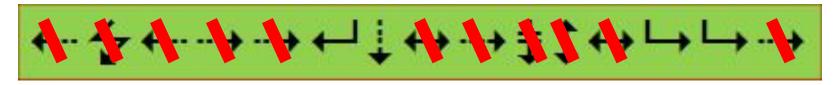
• S ?? ??.??? E ??? ??.???



- From the placed coordinates we can assume: **S 37 3**?.??? **E 140** [1,2]?.???
- Fill in known numbers:

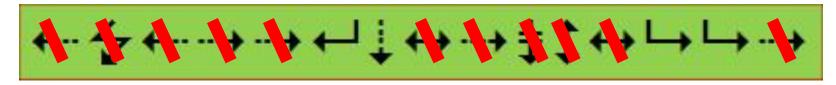
S 37 34.4?? E140 21.??4

• **S 37 34.4**?? **E140 21**.??4



- What numbers are left? 5, 6, 8, 9
- Down to 24 possibilities!

• **S 37 34.4**?? **E140 21**.??4



- What numbers are left? 5, 6, 8, 9
- Down to 24 possibilities!
- Look at the arrows for 3 & 4
- What can we assume for two of the remaining symbols?
- Down to four possibilities! Time for some guessing...

Where To Find Clues

- All clues needed to solve the puzzle must be on the cache page
- Some are obvious, some are not...

Most Puzzle Clues are Obvious

- For lower difficulty puzzles (and many high difficulty ones), the clue is obvious.
- What to do with the clue may be less obvious...

Most Puzzle Clues Are Obvious

Geocache Description:

THE CACHE IS NOT AT THE ABOVE CO-ORDINATES

To find the final coordinates you will need to research some history on Sir Isaac Newton to complete the mathematical equation.

While you won't need to be a mathematical genius to solve "THIS" equation, a calculator may come in handy.

According to the new style date (NS) Isaac Newton was born in the year? ____ = A

Isaac Newton died in the year? _____ = B

With the above information, now complete the following equation.

 185.27^2 / A = C (To three decimal spaces only)

 53.09^2 / B = D (To three decimal spaces only)

The cache can be located at:

S 27° C E 153° 0 D

Most Puzzle Clues Are Obvious

Geocache Description:

The published coordinates are NOT those of the cache (however, they are a useful starting point -- check out the attributes!)

While excavating for the new Fitzgibbon Chase housing estate, contractors recently unearthed a document buried for many thousands of years. Attempts to decipher it have so far been unsuccessful, though there is a strong suspicion that it describes the location of something else hidden nearby.

Can you unravel the mystery?

IL OT 2dret oddogp opp ot 12dr stip 69. HPHOdapi dedaoserer. of IDELHEDER Fi strolet. StiF spile strositi P Pas == de Os O otre Os od

Most Puzzle Clues Are Obvious

Geocache Description:

This cache is a dedication to my nana who taught me to crochet at 3.

I decorated three caravans side by side before my chain was perfect enough to learn the next stitch.

The above co-ordinates are not the location of the cache container.

Cache container can be found at S 27° htr dc. dtr (tr + dtr) htr E 153° slst tr. slst htr 2dtr



- Where to look if there is no obvious clue?
- What parts of the geocaching page does the submitter control? Cache description (including images, hint)
 Owner Name
 Background image
 Attributes
 Inventory

• The cache description can hide text

Geocache Description:

A cache in the Hook series

We hope you enjoy this series.

Additional Hints (Decrypt)

Cerff PGY+N

• The cache description can hide text

Geocache Description:

A cache in the Hook series

We hope you enjoy this series.

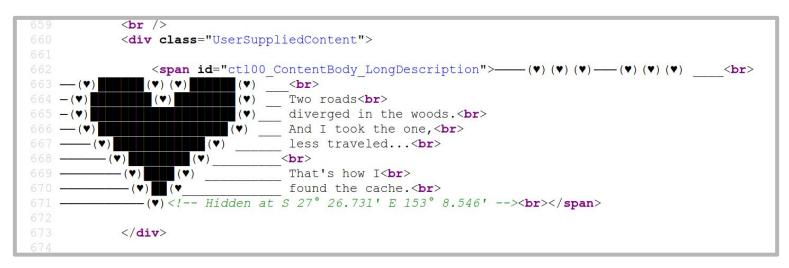
The cache can be found at S 35° 06.774 E 136° 57.798

Additional Hints (<mark>Decrypt</mark>)

Cerff PGY+N

Decrypt A|B|C|I

- Can have "comments" in a listing's source code
- View source ("Ctrl + U" on a web browser) and look for "UserSuppliedContent"



- Clues hidden in images (including background images...)
- EXIF
- Steganography
- Do a reverse image search in Google. Has the image been edited?
- Online Tools for Comparing Images (<u>https://online-image-comparison.com/</u>)

Know Your Puzzle Solving Tools

- Geocaching Toolbox (<u>www.geocachingtoolbox.com</u>)
- One stop shop for many puzzles!
- Coordinate conversion, projection, notation, intersection of circles, ...
- Text analysis and conversions, digital root, ...
- Encryptions and cyphers
- Many, many code tables
- Image tools

Example - GC6474Q

The Puzzle.

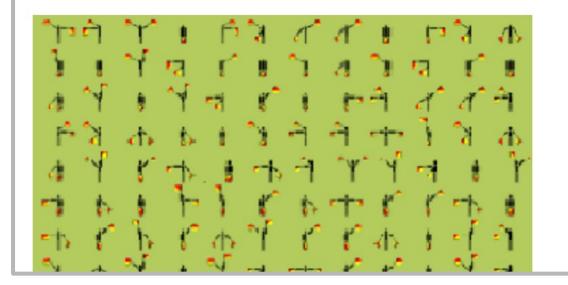
You will need to solve the below puzzle to work out the location of the cache itself.

A nice easy one for the beginner puzzle solvers. Here are the co-ordinates for the cache. 56J 438189 7000225 Just in a different format. You should be able to do this on your GPSr.

Example - GC6AEDD

The Puzzle.

You will need to solve the below puzzle to work out the location of the cache itself.



Know Your Puzzle Solving Tools

• Other useful sites

. . . .

- Multi Decoder (<u>http://fbcs.bplaced.net/multi_encoder_decoder.html</u>)
- dCode (<u>https://www.dcode.fr/</u>)
- Cipher Identifier (<u>https://www.boxentriq.com/code-breaking/cipher-identifier</u>)
- Geocaching Code Book (<u>https://geoleaks.com/gccodebook-v2-0-h.pdf</u>)
- Red Luth Riddle Tools (<u>http://luthorien.altervista.org/Tools/</u>)

Example - GC64754

The Puzzle.

You will need to solve the below puzzle to work out the location of the cache itself.

PSAJPU OARAJ ZACNAAO VANK AECDP LKEJP OET VANK PDNAA IEJQPAO OKQPD WJZ KJA BEBPU PSK ZACNAAO PSAJPU PDNAA LKEJP PSK OARAJ PSK IEJQPAO AWOP EO SDANA UKQ SEHH BEJZ PDA YWYDA BKN PDEO LQVVHA AJFKU PDA NEZA KJ UKQN IKQJPWEJ XEGA KN DKNOA KN FQOP SWHG PDANA.

Example - GC64747

The Puzzle.

You will need to solve the below puzzle to work out the location of the cache itself.

VGhlIGNhY2hlIGlzIGxvY2F0ZWQgYXQgdGhlIGZvbGxvd2luZyBjby1vcmRpbmF0ZXMgUyAyNyAwNi4wN

Just Google It

- If all else fails, try pasting the puzzle in Google
- Might find an easier variant on the puzzle elsewhere in the world
- Or...

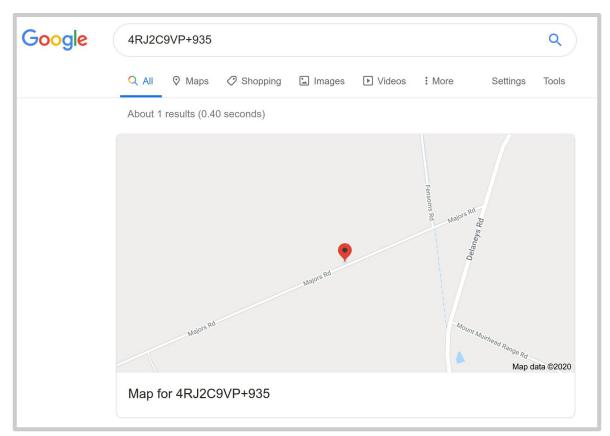


Solve the following puzzle to find the geocache.

4RJ2C9VP+935

- I have no idea what this is...
- Paste it into Google

Example - GC88PZD



Starting Your Puzzle Solving Journey

- Pick easy difficulty puzzles to start with
- Don't worry if you can not solve a puzzle! It will still be there when you improve your puzzle solving skills.
- Read the logs. A naughty solver may have left a subtle hint... Cache owners probably do not like people doing that!
- Ask the CO for a hint. People want their caches found. (But do not expect a big hint for a D5 they are supposed to be hard!)

Starting Your Puzzle Solving Journey

• Try some geoart!

