Title: Algorithm to compute the number of carrots needed to complete a proof Author(s): Jeroen Hanselman and Mardi the Math bunny

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# **Technical review**



## **BASIC INFO**

Files provided		Programming languages: Standard software used: System space used for re-	Python 3.11.1 Magma V2.26-6
<ul><li>☑ Source Code</li><li>□ Notebook</li></ul>	<ul> <li>Documentation</li> <li>Computed data</li> </ul>	view:	Xeon(R) CPU E5-2697A v4 @ 2.60GHz, 756GB
<ul><li>Examples</li><li>Docker file/VM</li></ul>	<ul> <li>Files that verify computed data</li> </ul>	Version reviewed:	No version numbering. Files reviewed were last changed on the 22nd of September 2022
		Downloaded from:	https://www.mardi4nfdi.de/

#### **IMPORTANCE OF SOFTWARE IN THE PAPER**

The repository contains the implementation of the algorithms and the results of the computations described in the paper.

## **Reproducibility** (Installation)

License:	No license found
Availability:	The files were uploaded to GitHub
Readme:	+ The repository contains a Readme explaining the contents of the Github.
Installation:	+ Straightforward.

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#### **INSTALLATION STEPS TAKEN**

#### Magma Code:

• Cloned https://github.com/MaRDItheMathbunny/MaRDICode from GitHub

## **REPRODUCIBILITY (RECORDS OF SETUP)**

Specification of CPU: Specification of Memory: Specification of OS/software	<ul> <li>Did not find what CPU was used.</li> <li>Did not find the amount of memory used.</li> <li>Did not find which Magma version was used.</li> </ul>
used: References and citation:	Magma is cited. The other packages the software builds on or depends on are properly cited.
REPRODUCIBILITY (RUNNING TH	ie code)

#### UCIBILITY (RUNNING THE CODE)

Magma Code:	The code seems to run fine. It does give a small error however:
	<pre>In file "Carrot.m", line 587, column 9: &gt;&gt; bunny := [ 0, 0, 0];</pre>

### **CORRECTNESS AND RELIABILITY**

Recalculating the examples:	I find it a bit hard to check whether the code produces the same results as what the authors got. There are a lot of files in the Github and it was unclear to me what files I should look at.
Readability	
Annotation : Indentation and formatting: Naming of variables :	The code is clearly annotated.
Comments	

None.