

# All the Winning Bites for a by b Chomp for a and b up to 14 and Two Computational Challenges

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[.txt](#) [only .txt format]

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**Dedicated to Richard K. Guy (b. Sept. 30, 1916) on his forthcoming 102<sup>th</sup> birthday.**

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**In the classic book, *Winning Ways*, by Berlekamp, Conway, and Guy they briefly (volume 2, Chapter 18, pp. 598-599) mention the game of Chomp, and present a table of the winning bites for small boards. Here we extend their table to boards with length and width up to 14, and present two computational challenges, that would make the OEIS 500 and 100 dollars richer, respectively.**

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**Acknowledgment: This short article was inspired by Purui Zhang and Lu Yan who just found an intriguing extension to [Multiplayer CHOMP](#) . Purui Zhang and Lu Yan are entering freshmen(!) from Fudan and Tsinghua Universities, respectively.**

# Maple package

- [CHOMP.txt](#), a Maple package to compute winning moves for Chomp positions.
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## Sample Input and Output for CHOMP.txt

- If you want to see an extension of the Table in Figure 9 of Winning Ways II (p. 599), listing all the Winning Bites for a by b chomp with a,b up to 14 (in OUR notation, consistent with matrix notation) the [input](#) file generates the [output](#) file.

- **If you want to see an extension of the Table in Figure 9 of Winning Ways II (p. 599), listing all the Winning Bites for a by b chomp with a,b up to 14 (in the Winning Way's notation)**

the [input](#) file generates the [output](#) file.

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