



MaPP Challenge '19 - To Infinity And Beyond

Mathematical Puzzle Programs



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Part I

About



MaPP Challenge '19 - To Infinity And Beyond Scoresheet

Game Control and your team each have a copy of this scoresheet. When submitting solutions, bring your team's copy to Game Control to be updated.

School Name	Team Name/ID	League
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Opening Puzzle: Where No One Has Gone Before — Used to unlock Main Puzzles

Main Puzzles

1500VP for each Main Puzzle solved; Time Solved used to break ties in VP

1	Clontz - Hamiltonian Decompositions	Time Solved	VP Earned
2	Carrigan - Art gallery problems	Time Solved	VP Earned
3	Couch - Matroids(?)	Time Solved	VP Earned
4	Clontz/Varagona - Idempotent Relations	Time Solved	VP Earned

Cryptic Puzzles

500VP for each Cryptic Puzzle solved; Time Solved used to break ties in VP

1	Clontz - Constellations	Time Solved	VP Earned
2	Clair - Space Travel	Time Solved	VP Earned
3	Clontz/Reiter - KenKenKen	Time Solved	VP Earned
4	Clontz/Harshbarger - Word Problem	Time Solved	VP Earned

Bonus Puzzle

Up to 500VP for best submission

Holshouser - Origami	First Submission	Second Submission	Third Submission	VP Earned
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Metapuzzle

1000VP if solved, Time Solved used to break ties in VP

???	Time Solved	VP Earned
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Up to 500VP if earned, Time Acquired used to break ties in VP

Additional VP	Time Acquired	VP Earned
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10,000VP Maximum

Total VP Earned

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Part II

Puzzles



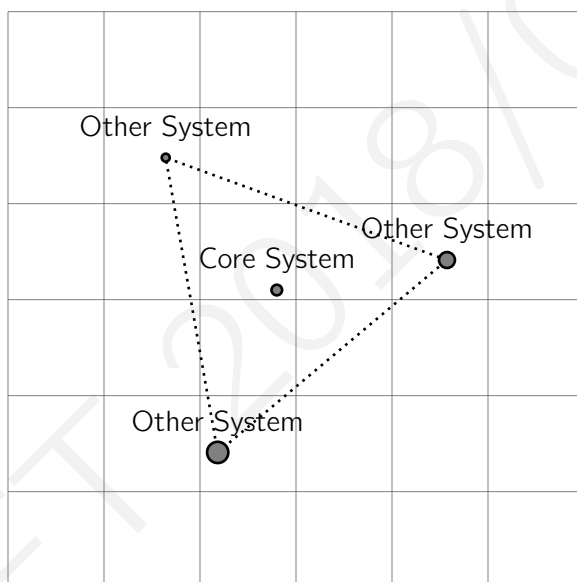
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Where No One Has Gone Before

Opening Puzzle

Today's adventure begins as your team's ship launches into space. Space Fleet has provided you a **Galaxy Map** to guide you on your way. (Actually, several copies have been provided to you! Take care of these copies, as you will refer to the Galaxy Map several times throughout the adventure.) Each dot on the map refers to a different solar system, named on the map.

Space Fleet commands you to first visit the four **Core Systems** of the galaxy. You can recognize a Core System by the fact that it is located in the middle of a regular polygon (all sides are the same length) formed by either three, four, five, or seven other systems. An example is shown below.

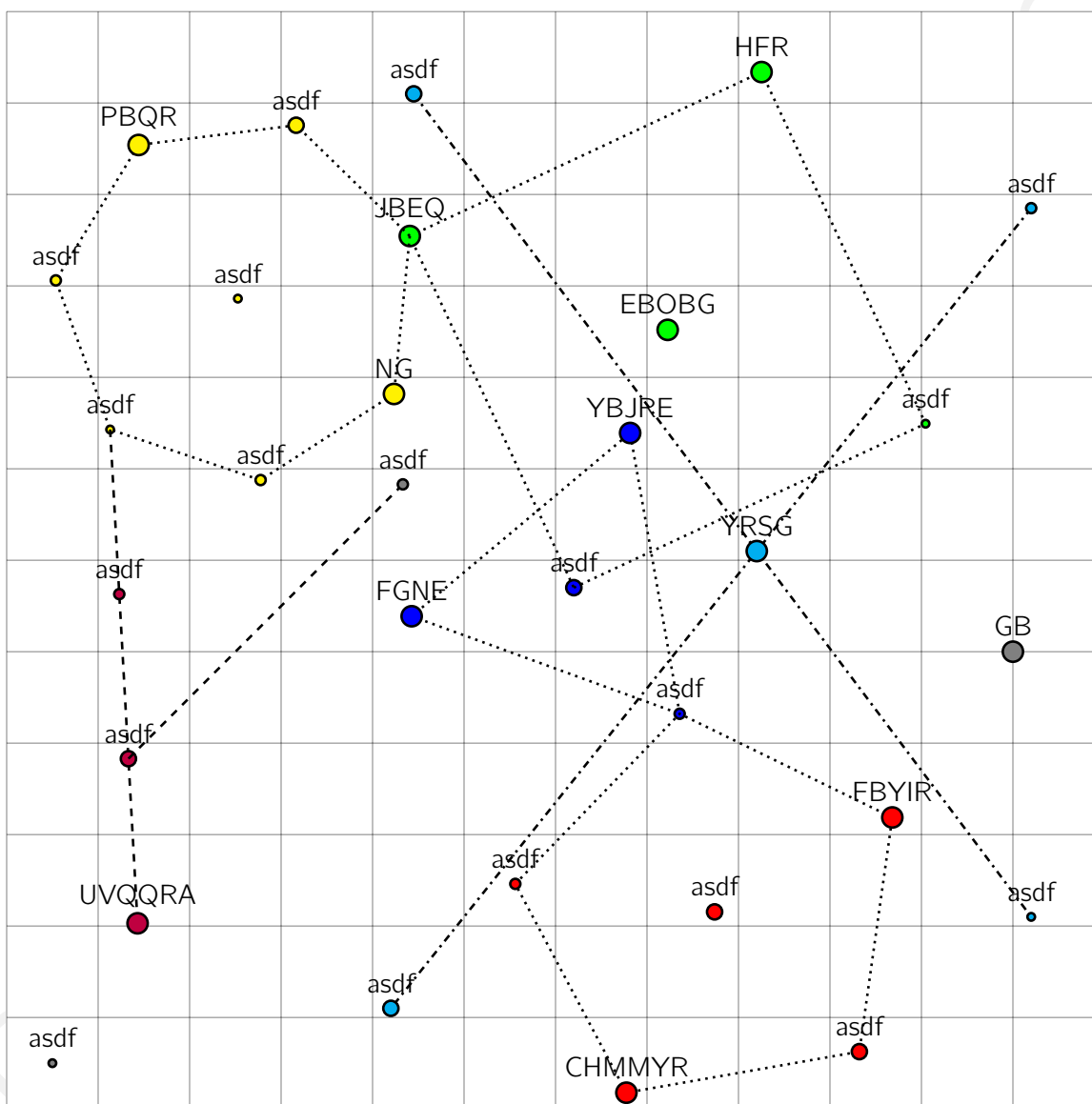




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Where No One Has Gone Before

Galaxy Chart





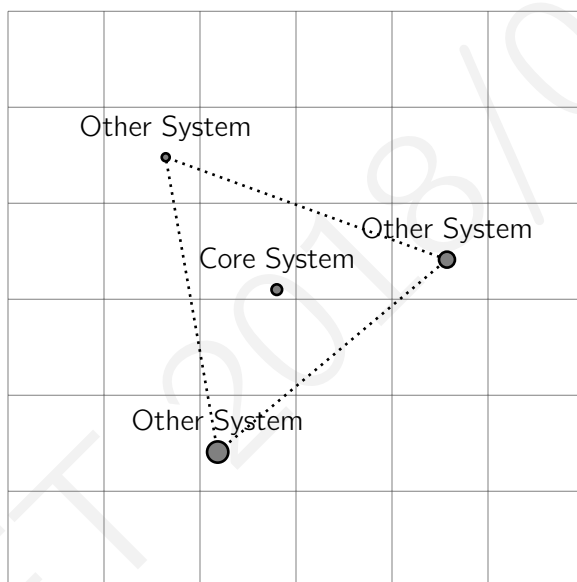
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Good News Everyone

Main Puzzle 1

Today's adventure begins as your team's ship launches into space. Space Fleet has provided you a **Galaxy Map** to guide you on your way. (Actually, several copies have been provided to you! Take care of these copies, as you will refer to the Galaxy Map several times throughout the adventure.) Each dot on the map refers to a different solar system, named on the map.

Space Fleet commands you to first visit the four **Core Systems** of the galaxy. You can recognize a Core System by the fact that it is located in the middle of a regular polygon (all sides are the same length) formed by either three, four, five, or seven other systems. An example is shown below.





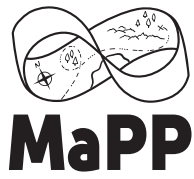
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Good News Everyone

Delivery Schedule

Home	Monday							Monday
	Wednesday							Wednesday
	Friday							Friday

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Word Problem

Cryptic Puzzle 4

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Word Problem

Mysterious Message

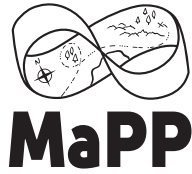
For a time I tried carefully to detail yarns via large crawling textboxes.

However, composing all of the concepts when curbed by finite room, the new strategy now is...

DRAFT 2018/08/26

Part III

Solutions



MaPP Challenge '19 - To Infinity And Beyond Solutions

Suspendisse vitae elit. Aliquam arcu neque, ornare in, ullamcorper quis, commodo eu, libero. Fusce sagittis erat at erat tristique mollis. Maecenas sapien libero, molestie et, lobortis in, sodales eget, dui. Morbi ultrices rutrum lorem. Nam elementum ullamcorper leo. Morbi dui. Aliquam sagittis. Nunc placerat. Pellentesque tristique sodales est. Maecenas imperdiet lacinia velit. Cras non urna. Morbi eros pede, suscipit ac, varius vel, egestas non, eros. Praesent malesuada, diam id pretium elementum, eros sem dictum tortor, vel consectetur odio sem sed wisi.

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Aliquam lectus. Vivamus leo. Quisque ornare tellus ullamcorper nulla. Mauris porttitor pharetra tortor. Sed fringilla justo sed mauris. Mauris tellus. Sed non leo. Nullam elementum, magna in cursus sodales, augue est scelerisque sapien, venenatis congue nulla arcu et pede. Ut suscipit enim vel sapien. Donec congue. Maecenas urna mi, suscipit in, placerat ut, vestibulum ut, massa. Fusce ultrices nulla et nisl.