

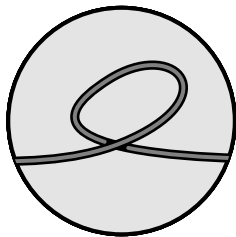
# MaPP Challenge '18 - Gotta Solve 'Em All

## Knot True

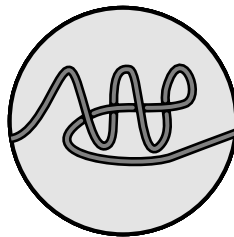
### Teaser Puzzle

In MaPP Challenge '18 - Gotta Solve 'Em All, your team will travel to the world of **Mobimon**, where trainers befriend monsters and battle them against their opponents! (Now where have I heard that idea before?...) Of course, you'll probably find yourself encountering a wild **puzzle** or two, so let's see how you deal with this conundrum...

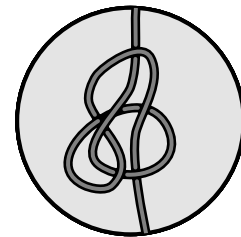
In a previous Mobimon tournament, six trainers competed and were ranked 1st through 6th: Ash, Brock, Cynthia, Drayden, Erika, and Flannery. You have been told the following statements about these results:



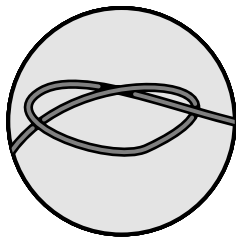
Ash and Flannery did not place 6th.



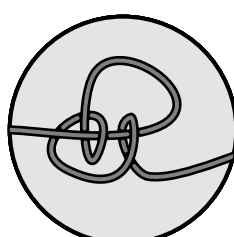
Erika placed exactly one rank higher than Ash.



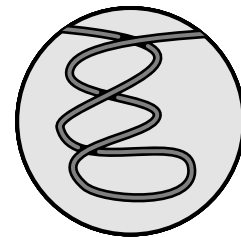
Brock placed lower than Flannery.



Neither Brock nor Drayden placed 4th.



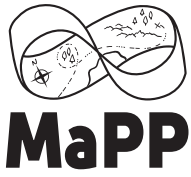
Drayden placed in the top three.



Either Cynthia or Drayden placed 3rd.

Unfortunately, there's no way all of those claims are **truthful**. By inspecting the **Trainer Badge** above each statement, you can uncover the **lies** by deciding if the cord depicted in its design would **tighten into a knot** if pulled taut; if the cord wouldn't knot when pulled, then the statement is true. By blacking out the incorrect results below, you'll reveal the answer to this riddle: *what is a mathematician's favorite kind of knot?*

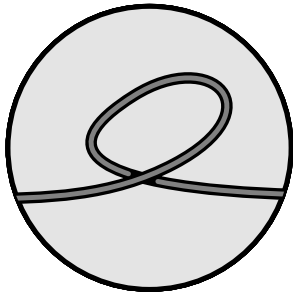
	Ash	Brock	Cynthia	Drayden	Erika	Flannery
1st	O	Y	G	U	S	J
2nd	Q	C	M	V	A	X
3rd	F	P	U	N	I	E
4th	L	A	S	I	D	T
5th	K	N	B	Z	T	R
6th	H	R	W	E	L	M



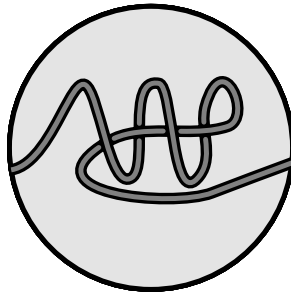
MaPP Challenge '18 - Gotta Solve 'Em All

# Knot True

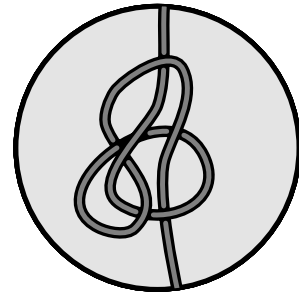
## Teaser Puzzle Trainer Badges



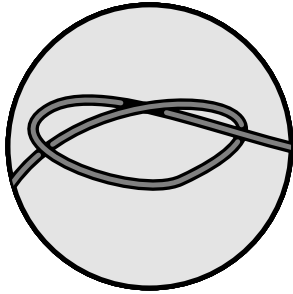
Ash and Flannery did not place 6th.



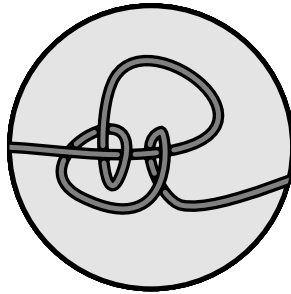
Erika placed exactly one rank higher than Ash.



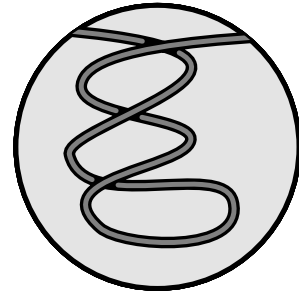
Brock placed lower than Flannery.



Neither Brock nor Drayden placed 4th.

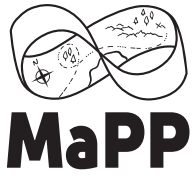


Drayden placed in the top three.



Either Cynthia or Drayden placed 3rd.

	Ash	Brock	Cynthia	Drayden	Erika	Flannery
1st	O	Y	G	U	S	J
2nd	Q	C	M	V	A	X
3rd	F	P	U	N	I	E
4th	L	A	S	I	D	T
5th	K	N	B	Z	T	R
6th	H	R	W	E	L	M

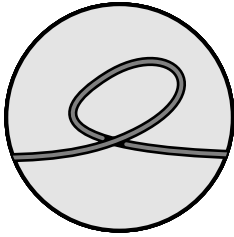


# MaPP Challenge '18 - Gotta Solve 'Em All

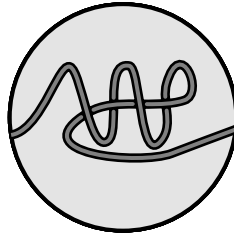
## Knot True

### Teaser Puzzle Solution

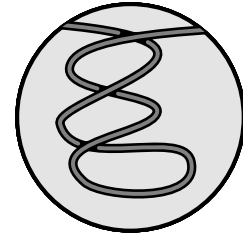
The following cords wouldn't tighten into a knot, so their clues are **true**.



Ash and Flannery did not place 6th.

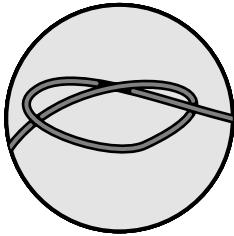


Erika placed exactly one rank higher than Ash.

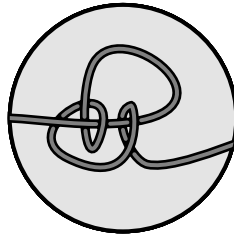


Either Cynthia or Drayden placed 3rd.

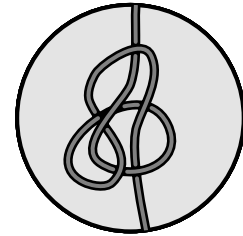
The following cords would tighten into a knot, so their clues are **false**.



Neither Brock nor Drayden placed 4th.  
Corrected: Either Brock or Drayden placed 4th.



Drayden placed in the top three.  
Corrected: Drayden placed in the bottom three.



Brock placed lower than Flannery.  
Corrected: Brock placed higher than Flannery.

Logically, this results in the following grid.

	Ash	Brock	Cynthia	Drayden	Erika	Flannery
1st	O	Y	G	U	S	J
2nd	Q	C	M	V	A	X
3rd	F	P	U	N	I	E
4th	L	A	S	I	D	T
5th	K	N	B	Z	T	R
6th	H	R	W	E	L	M

A mathematician's favorite knot is a SQUARE knot! Oh... you say you've heard that one before? Well, our **puzzles** are better than our **jokes** at the **MaPP Challenge**, so we hope to see you there!