

Judging Big Questions



Resolved: Mathematics was discovered, not invented.

Prior to hearing these debates, I side with the

(Aff/Neg).

Make sure to recognize your personal bias and remove it from the evaluation of the round.

Your Role

There may be space for you to enter tournament information (date, location) and students' identifying codes at the top of the ballot. This can be done before the debate begins.

During the debate, a judge should keep track of the arguments being made. Organized notes of the important points you thought were raised during the round will help you complete you ballot and may help you make a decision about who was better at debating.

Students are allowed and encouraged to time themselves, but you may also choose to time various parts of the debate, particularly the Question Segments and each student's preparation time.

After the debate is over, complete the ballot by writing: 1) The best case you could make for why the affirmative wins the debate you heard and any comments. 2) The best case you could make for why the negative won the debate you heard and any comments. 3) The reason the debater you chose to win did the better debating. Mark which side you picked to win!

The Debate

Each round features two sides: one representing the affirmative and one representing the negative. Each side gives four speeches, and there are three periods of questions. Students will attempt to prove or disprove the statement: "Resolved: On balance, societies benefit from religious belief and practice."

Affirmative Constructive – 5 minutes Negative Constructive – 5 minutes Question Segment – 3 minutes

Affirmative Rebuttal – 4 minutes Negative Rebuttal – 4 minutes Question Segment – 3 minutes

Affirmative Consolidation – 3 minutes Negative Consolidation – 3 minutes

Affirmative Rationale – 3 minutes Negative Rationale – 3 minutes

Each side has 3 minutes of preparation time during the debate, to be used in increments of their choice. For example, a student may elect to prepare for 1 minute for their rebuttal speech, 1 minute for their consolidation speech, and 1 minute for their final speech. Students may also prepare "for free" during each other's preparation time.

Topic Primer

So many of us have found ourselves in a math class at one point or another asking "how do they come up with something like this?" The resolution asks the same question in just a slightly different way. The core issue at hand is whether math is something that already exists and is something that humans uncover slowly through science and experiments or is it something entirely created by humans to help us navigate the world?

On this topic, the affirmative will want to convince the judge that mathematics was discovered. This means that math already existed and human studies have just been slowly uncovering more and more of the equation and truth as we develop. This is similar to how the philosopher Plato believed there are certain abstract truths that exist and philosophy seeks to find them, not create them. In order to begin thinking about how to convince judges math was discovered, we can ask ourselves "if math is merely a human invention, why does it appropriately fit with natural phenomena so well?" Another way to think of this is to ask "if everyone disappeared tomorrow, would mathematical truths still exist?"

Conversely, the negative team is tasked with arguing that mathematics was not discovered, but invented. They want to convince the judge that math is a tool that humans have created to explain the world around us and those tools have been sharpened over centuries of experimentation and refinement. Richard Milton Martin, Nelson Goodman, and Willard Quine are all famous for their philosophies of math and logic that use these ideas. While seeming very complex, their theories boil down to a simple point: mathematical principles and ideas don't exist outside of our understanding. They would point to the constant changing of formulas or updating of ideas as proof that these are tools and inventions. One could also use these points to say that the idea that math is discovered puts the cart before the horse. We use math as we examine the world and try to align it with reality as much as possible. It is because of this process that it reflects reality, not because of an abstract truth that is lurking outside of our reach.

These questions at first blush are extremely complex and deep, but that's why they make for such fascinating debates. That last point to remember is that teams should feel free to explore the topic and make arguments they find persuasive or strategic.