

Ruth Vanderpool

Origami Math

Abstract

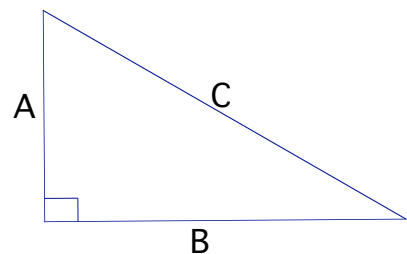
I will write this *last!!!* In general, abstracts can't be written until the paper is finished!!! Notice that the rubric does takes into account if the abstract goes over the limit or does not effectively use the space.

Pythagorus. (brainstorming version)

My introduction will go here. I plan to briefly introduce Pythagorus as well as the well known theorem that bears his name. I'll tell the reader that this paper will provide a historical frame of reference, describe his theorem, and explain how he introduced the idea of axioms to solve his problem.

Appropriate history should go in this paragraph. Perhaps mention that Croton was experiencing a religious revival "leading to a plethora of quasi-religious communities...(that) shared (an) appreciation of a roster of taboos and rituals" (Barrow 1992). Pythagorus had a particularly interesting one that seemed to worship numbers and assumed their deep connection with, among other things, geometry.

Use the geometry from the previous paragraph to transition to the right triangle. Define what a right triangle, mention it is pictured to the right, and then provide the Pythagorean Theorem.



The tools to approach this problem at the time where the compass and the straightedge. Try to explain why these would have been the preferred tools (didn't they have a protractor around by then?) Pythagorus probably did use these tools. There is a story about how Pythagorus thought about this problem because he was looking at tiles (need reference for this!)

Pythagorus went beyond just using the physical tools, and introduced the idea of an axiom (Bell 1937). An explanation of the idea of axioms seems like a good fit here.

A conclusion definitely should be written, and it should not be flashy. Don't over blow Pythagorus' importance, but don't minimize it either. I'll simply summarize what I covered in the paper.

References

- Barrow J. D. 1992. *Pi in the Sky: Counting, Thinking, and Being*. Oxford: Clarendon Press.
- Bell E.T. 1937. *Men of Mathematics*. New York: Simon And Schuster, Inc. 19-35.