

Is Algebra Necessary?

In many US high schools, students are required to pass an Algebra course in order to graduate. Should it be?

The study of algebra in K-12 education is largely focused on solving equations of real numbers, but no mention is made of why we can solve these equations, or why real numbers work the way they do. We've been exploring algebra at a deeper level in our class, and can see that it is the underlying group structure that makes the algebra we learned in school "work". We also see some of the usefulness of algebra, especially as it relates to coding theory (and hence computer technology, and computer security). But does this justify that basic algebra skills should be part of what society considers basic knowledge? Argue yes or no in an essay designed to convince your reader of your position.

Your goal is to take a single position and offer compelling rationale for it with the intention of getting your reader to agree with you. You have 3-4 pages to do this (ie, your paper must be at least 3 pages, but should not go much beyond 4 pages). You might check out

https://owl.purdue.edu/owl/general_writing/common_writing_assignments/argument_papers/index.html

(and the rest of the writing resources linked to this site) for some ideas on how to write a strong paper. In addition, pay attention to the technical parts of writing. Be sure to write in complete sentences, avoiding run-on sentences and sentence fragments. Be sure that your paragraphs have a single main thought, and that your paragraphs flow together to make a coherent essay. Be sure that your sentences have subject-verb agreement. Be sure that you use a consistent voice throughout your paper. Be sure that when you use "this" or other pronouns to refer to something mentioned earlier that the antecedent is, in fact, what you intend it to be.

Guidelines for Papers

Papers should be double-spaced, using calibri 12 font, and have no more than a 1-inch margin on any side (including top/bottom). They should have one line of heading, with the title of the essay aligned on the left, and your name aligned on the right. Notice, your paper should have only one line of heading. For citations and bibliographies throughout the term, MLA style should be used.