

Algebra Anyone?

Leslie Jones

When an Elementary Algebra class is in progress, repeated choruses of "Why do we have to take *Algebra* anyway?" can be heard echoing down the college corridors. I was an avid member of this chorus in the early weeks of DE060 while struggling to get my aging brain to grasp the basic concepts. But, as my ability to handle algebraic complexities increased, I gradually became aware of the benefits of Algebra. They have little to do with the usefulness of any particular math skills and formulas in the future and more to do with the reality that solving life's problems is rather like the process of learning and doing Algebra. Time, skill, wisdom, and determination are necessary keys for success in both endeavors.

The effort of gaining skills and solving problems, whether in life or in Algebra, often takes a sizable investment of time and energy. Adequate time does not magically appear in the crowded schedules of late 20th century lifestyles, it has to be carved out, sometimes ruthlessly. New priorities have to be established, if only temporarily, and ways of using time more efficiently will have to be discovered in order to accomplish everyday chores more quickly. But first and foremost, finding time to learn skills and solve problems depends on a *willingness* to invest the required time and a *determination* to give whatever it takes to accomplish the goal at hand. Some of life's problems hardly seem worth this investment, just like Algebra. Doing so anyway increases discipline, focus, and understanding for those times that are critical.

Not only is it necessary to gain knowledge and skill to effectively solve problems, but wisdom is also needed to decide which option to choose and when. I have often thought about this when confronted with setting up and solving an equation or simplifying an algebraic expression, especially one that contains a complex fraction. Invariably I forget to keep track of the signs or remember the rules that govern them, and so I arrive at an incorrect solution. There are so many questions to ask of myself and many that I forget to ask. Have I reduced or factored far enough? Is it even factorable? Sometimes I forget to factor all together or forget

that eliminating fraction denominators any where but in an equation is not allowed. I love to get rid of those irritating fractions. When working on a personal problem I have often pictured a complicated polynomial expression in my mind's eye and the confusion of all the rules, terms, and variables involved in simplifying it. When I think of an equation, I am reminded of balance as I remember that what is done to one side of the equation must be done to the other. Balance is a good thing to keep in mind when solving problems. I don't always get my solutions right in life or in Algebra, but the more I practice and understand my mistakes, the more my wisdom and skill improve. This is most definitely an advantage.

Finally, Algebra is a wonderful opportunity for strengthening determination and self-confidence, valuable character traits when faced with a problem. It is the only academic subject I have taken where it is possible to gain some degree of understanding and confidence only to turn the page to the next chapter and not have the slightest idea about what the text is attempting to explain. This is disequilibrium... "BIG time." At its worst disequilibrium involves a fear of the unknown, of not knowing right away. At best it is simply confusing and frustrating. Either way the temptation is to avoid it rather than gather up the courage and patience to stand firm and stick with the assignment until the light dawns; to not give up on one's own potential and trust that eventually the light *will* dawn. I can foresee that pushing through the dark chapters in Algebra will help when the dark chapters in life occur, problems for which past experience has not been adequate preparation.

After satisfying the math and science requirements for a degree, it may be true that I will never again use the particular math skills I have learned along the way. I will not, however, consider the investment of my energy a waste of time. The reward of improved discipline, skill, wisdom, and determination will be useful keys of success for the rest of my life, especially when confronted with the "impossible."

-WRITE AND SWAP- WE WANT TO KNOW WHAT YOU THINK

Read the article on the reverse side by Leslie Jones and comment on some aspect of the article which interests you. You may comment on a single sentence, several sentences, a paragraph or the entire article.

UNDERLINE OR CIRCLE THE SECTION YOU ARE COMMENTING ON

Exchange papers with your partner and read their comments. Then add your thoughts about what your partner has said. Exchange papers back and discuss each others' comments and opinions.

FIRST PERSON'S COMMENTS _____

PARTNER'S COMMENTS _____

NAME _____ name _____

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DE060

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