## **Completing Assignments**

- The general idea is to complete the weekly assignment by the end of the week. However, I don't agree with the notion that all students should do the same amount of work. Part of the beauty of the Math Academy is that we have flexibility.
- As high school students, you need to take some responsibility for your own learning. You can look at any assignment and decide which problems you need to work on for your own learning. Remember the goals are both to strengthen your mathematical thinking abilities, and to improve your math skills. If you put forth the effort, impressive results will follow. It's really up to you!
- As a general rule, students should take photos of their math work and send it to their tutor either right after they have done any work, or at the end of the week. It's a good habit to get into, and it keeps your tutor abreast of the work you are doing.
- Main lesson work is somewhat different in this regard. You don't generally need to send your tutor
  notes or rough drafts of essays, for example. You can just send completed essays at the end of the
  week.
- Keep in mind, it is not your tutor's responsibility to correct your assignments. You have answer keys, so you should check to see which problems you have gotten wrong and try to figure out what the mistake is. You can bring questions about some of the problems to your tutorial session.

## **Rules for Calculators**

- 1. <u>Do you really need to use a calculator?</u> Under normal circumstances, we try to minimize calculator use in our Math Academy work. However, we know that there are many students who never mastered their basic arithmetic facts (8x7=56, 13-8=5, etc.), and we don't want anyone to waste time doing hand calculations. So, if you must use a calculator, then please keep the following things in mind...
- 2. <u>Think first, then use the calculator</u>. Don't just blindly put it into the calculator. When you just put something into a calculator, it will give you an answer. But remember: if you are not thinking, then you won't learn anything!

Example #1 Simplify -34 - 69

Solution: Just put 34+69 into the calculator (which gives us 103), and the answer is: -103.

Example #2: Simplify 28 - -44

Solution: Think! I know this is the same as 28 + 44, which gives an answer of 72 (positive).

- 3. Estimate before hitting the equals button.
  - Using the above example, you put 28+44 into the calculator, but just before you hit "=", pause and ask yourself: "What do I think the answer will be?" Then hit "=" and look at the answer. How close were you? This will help you learn.
- 4. <u>Break problems into parts</u>. Instead of typing some crazy long expression into the calculator and believing whatever it said blindly, do it in steps.
  - For example: How could you calculate  $\frac{534}{728-338}$ ? One possible way would be to do the denominator first, and type this into your calculator: 728, –, 338, =. At this point the answer for 728–338 has been stored into ANS (your calculator's memory of the last answer). So now you type: 534,  $\div$ , ANS, = and you will see your final result. Notice that we also didn't feel it was necessary to use the fraction button of the calculator for this problem.
- 5. <u>Don't use the calculator, for a problem that you can do in your head easily</u>. For example, don't use a calculator for 7x100.
- 6. And remember, the Gnome Calculator Police are always watching you to make sure you are following the above rules!