Getting the Most Out of Math Classes

Be Prepared - A little bit of effort before class goes a long way towards mastery
- Preview your syllabus to find out what sections or chapters you are going to cover that day.
- Scan these sections in your textbook. This should give you an outline or framework for what you are going to learn.
- Identify:
  - What concepts are covered? Look at the section headings and titles
  - What theorems, proofs or methods are demonstrated? Note-taking is much easier if you know what to expect
  - What order is the information presented in? It is most effective to get the big picture of what material will be covered as concepts tend to build on each other.

Take good notes - Effective notes go beyond copying what the instructor writes on the board
- The Two-column Note Taking Method:

<table>
<thead>
<tr>
<th>Theory</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definitions, formulas and proofs go here</td>
<td>Example problems, graphs, diagrams and other notes</td>
</tr>
<tr>
<td>Also write book page numbers or sections</td>
<td></td>
</tr>
<tr>
<td>Draw lines to show connections between examples and theory</td>
<td></td>
</tr>
<tr>
<td>Leave space for anything you missed</td>
<td></td>
</tr>
</tbody>
</table>

- Try to get the examples or names of theorems written down in the lecture. That allows you to ask specific questions to figure out what you missed. If you don’t know what the example was, it’s hard for a tutor to help you with it.
- Scanning the chapter ahead of time provides you with a mental framework to fill in vs. trying to put everything together piece by piece as your instructor lectures.

Make the connections – Structuring your knowledge allows you to retain it longer and access it more easily
- Fill in anything you missed from lecture with the book or instructor
- Look through and solve the example problems in the book
- Make a reference sheet and extract the key information and formulas so that you can refer to them. Number them and when you use your reference sheet for a problem, make a note of which references you use! When it’s time to make a note card for the test, you know what to use.

If you are having trouble keeping up with the instructor, don’t try to write down everything, but focus on identifying what you will need to know and then fill in the gaps later.

Reviewing 30 minutes every day will be more effective than cramming the night before the test.