Outline of the Beginning Pre-Algebra course

Course Description

This course builds the core math skills required for the student to be successful in Algebra. Students are introduced to working with whole numbers, negative numbers, decimals, fractions, ratios and percentages. The course will also introduce a small amount geometry limited to rectangles and simple triangles. There is a strong emphasis in the course to use core math skills towards solving real world problems.

Course Mechanics:

- 3-5 hours of lecture a week (or 5 hours of online video)
- Weekly or every other week quizzes
- 1-3 midterms (online or in class)
- One final (almost always in class)

A typical student should expect to spend about 3-5 hours in class (or watching online videos) and an additional 10-15 doing homework and studying per week.

Topics Covered and Required Prereq skills

<table>
<thead>
<tr>
<th>Topic</th>
<th>Prereq required</th>
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</thead>
<tbody>
<tr>
<td>Whole numbers</td>
<td>None</td>
</tr>
<tr>
<td>Fractions and Mixed Numbers</td>
<td>None</td>
</tr>
<tr>
<td>Decimals</td>
<td>None</td>
</tr>
<tr>
<td>Ratio Proportion and Percent</td>
<td>None</td>
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Preparing for the Course

The following things can be done to help prepare for the course.

Prepare a notebook: Prepare a binder to keep all your returned math homework and quizzes in. The final is most likely comprehensive; having all your completed and graded work neatly grouped by topic will help a lot with studying for the final.

Purchase a calculator: If you do not already own a calculator, it may be a good idea to purchase one. While calculators are often not allowed for test in this course, it is still good to have one to check your work on assignments. Any calculator will be sufficient for Math 081, but if you plan on taking subsequent math courses a two-line scientific calculator is recommended.

Some calculator recommendations are:

- TI-30X IIS and the Ti-83 both from Texas instruments. The Ti-83 has the additional advantage of being useful in the Math 146 (Statistics) course.

Additional Resources

Online Pre-Algebra Materials:

HTTPS://WWW.KHANACADEMY.ORG/MATH/PRE-ALGEBRA

Free Pre-Algebra Worksheets With Answers:

HTTPS://WWW.KUTASOFTWARE.COM/FREEIPA.HTML

(Relevant Topics: Basics, Arithmetic, Number Theory, Proportions and Percents, Solid Figures, Word Problems)

Training Fund Tutoring:

Both online and in-person group tutoring is available by request check out:

http://healthcareerfund.org/tutoring/