# Virginia Western Community College MTH 130 Fundamentals of Reasoning 

## Prerequisites

MTE 1, MTE 2, and MTE 3 or a placement recommendation for MTH 130 or equivalent.

## Course Description

Presents elementary concepts of algebra, linear graphing, financial literacy, descriptive statistics, and measurement \& geometry.

## Semester Credits: $\mathbf{3}$ Lecture Hours: $\mathbf{3}$

## Required Materials

## Textbook:

Mathematics - Its Power \& Utility. Smith. 10th edition. Cengage. ISBN: 9781111577421.
Other Required Materials:
Calculator

## Course Outcomes

At the completion of this course, the student should be able to:

- Be able to use reasoning skills and knowledge/skills acquired in the course to solve mathematical problems.
- Be able to use technology to assist with solving mathematical problems.
- Be familiar with traditional approaches to solving mathematical problems and capable of using these approaches when necessary.
- Be capable of using mathematical models correctly given specific problem situations.
- Think critically and analytically about problems that require mathematical solutions.


## Topical Description

| Chapter | Topic <br> Arithmetic, Calculators <br> and Problem Solving |
| :--- | :--- |
| 2 | Sets of Numbers |
| 3 | Introduction to Algebra |
| 4 | Percents and Problem <br> Solving |
| 5 | Introduction to Geometry |
| 6 | Measurement and <br> Problem Solving |
| 7 | Applications of Percent |
| 10 | Statistics |
| 11 | Graphs |

## Notes to Instructors

1. The final exam must be comprehensive and be at least $25 \%$ of the total course grade.

## Virginia Western Community College

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