Chapter 1 & 2.1-2.5 Review MA1032 Data, Functions & Graphs

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Tools 1

- Linear Equations
- Exact vs. Approximate Solutions
- Systems of Equations
- Substitution & Elimination

- Definition of a Function
- Function Notation
- Uniqueness
- Representations of a Function
- Vertical Line Test

- Rate of Change
- Increasing/Decreasing Functions
- Function Notation for Average Rate of Change

- Functions with a constant rate of change
- Construction of linear models
- Slope and the general form of a linear function

- Different rates of change on a linear graph
- Different initial values on a linear graph
- Linear function from numerical data, a graph or a description
- Three linear forms

- Parallel & perpendicular lines
- Horizontal & vertical lines
- Intersection of two lines

Tools 2

- Expanding
- Factoring
- Solving Quadratics

- Keeping Inputs & Outputs Straight
- Abuse of Notation

- Domain & Range
- Graphically
- Technology Troubles
- Algebraically

- Piecewise functions
- Absolute value function

- Concept of an inverse
- Finding the formula for an inverse

 Relationship between the rate of change of a function and the concavity of the function's graph

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