The Author

The Big Book of

Equations

Packed with hundreds of examples and solutions

2011, Publishing company

Dedication

This book is dedicated to one of the greatest mathematicians of all time: Carl Friedrich Gauss. Without him, this book wouldn't have been possible.

Contents

Dedication i

Contents iii

List of Tables v

List of Figures vii

1 Equation 1
1.1 Quadratic equation 1

2 Equation Systems 3
2.1 Linear Systems 3
2.2 Non-linear Systems 3

Proofs 5

List of Tables

List of Figures

Chapter 1
Equation

1.1 Quadratic equation

Definition 1. A quadratic equation is an equation of the form

$$ax^2 + bx + c = 0 \tag{1.1}$$

where a, b and c are constants and $a \neq 0$.

Definition 2. A quadratic equation is an equation of the form

$$ax^2 + bx + c = 0, \tag{1.2}$$

where a, b and c are constants and $a \neq 0$.

Theorem 3. A quadratic equation 1.2 has two solutions for the variable x:

$$x_{1,2} = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}. \tag{1.3}$$

Chapter 2
Equation Systems

2.1 Linear Systems

...

2.2 Non-linear Systems

...

Proofs

...