

CONTENTS

	Page
Authentication sheet	i
Biography	ii
Abstract	iii
Preface	iv
Contents	vi
Figure List	ix
Table List	xi
Appendix List	xii
CHAPTER I. INTRODUCTION	
1.1 Problem Background	1
1.2 Problem Identification	6
1.3 Problem Limitation	7
1.4 Problem Formulation	7
1.5 Research Objectives	7
1.6 The Benefit of Research	8
1.7 Operational Definiton	8
CHAPTER II. LITERATURE REVIEW	
2.1 Theoretical Framework	9
2.1.1 The Essence of Learning	9
2.1.2 Mathematics Lerning	10
2.1.3. Mathematical Reasoning Ability	12
2.1.4. Reasoning Ability in Mathematics Learning	17
2.1.5 Realistic Mathematics Education (RME)	17
2.1.5.1 The Characteristic of Realistic Mathematics Education	19
2.1.5.2 The Principle of Realistic Mathematics Education	22
2.1.5.3 The Step of Realistic Mathematic Education	23

2.1.5.4 The Benefit and The Weakness of Realistic Education Implementation	25
2.1.5.5 Design of Realistic Mathematics Education Lesson	26
2.1.5.6 The Relationship between Realistic Mathematics Education with the Improvement of Reasoning Ability	29
2.1.5.7 The effectiveness of realistic mathematic approach in increasing students	30
2.1.6 The Lesson of Sets Matter	31
2.1.6.1 Understanding the concept of sets and venn diagram	31
2.1.6.2 Understanding Set Relation	33
2.1.6.3 Understanding Set Operation	42
2.2 Review of Relevant Research	52
2.3 Conceptual Framework	52
2.4.Action Hypothesis	53
 CHAPTER III. RESEARCH METHODOLOGY	
3.1 The Type of Research	54
3.2 Location and Time Research	54
3.3 Subject and Research Object	54
3.3.1 Research Subject	54
3.3.2 Research Object	54
3.4 Research Design	55
3.4.1 Research Procedure	55
3.5 The Instrument of Data Collection	58
3.5.1 The Instrument of Student Mathematical Reasoning Ability	58
3.5.2 Observation Sheet	59
3.5.3 Interview Test	60
3.6 Technique of Data Analysis	60
3.6.1 Data Reduction	60

3.6.2 Data Explanation	60
3.7 Performance Indicator	63
CHAPTER IV. RESEARCH RESULT AND DISCUSSION	
4.1 Description of Research Result	65
4.1.1 Result Description of Cycle I Research	65
4.1.1.1 Problem I	65
4.1.1.2 Action Planning Stage	65
4.1.1.3 Action Implementation I	66
4.1.1.4 Data Analysis I	68
4.1.1.5 Interview I	68
4.1.1.6 Data Analysis II	73
4.1.2 Description of Research Result in Cycle II	82
4.1.2.1 Problem II	82
4.1.2.2 Action Planning Stage II	83
4.1.2.3 Action Implementation II	83
4.1.2.4 Data Analysis II	86
4.1.2.5 Interview	92
4.1.2.6 Reflection II	92
4.2. Research Result Discussion	98
4.2.1 Learning Factors	98
4.2.2 Mathematics Reasoning Ability	100
4.3 Research Findings	102
CHAPTER V. CONCLUSION AND SUGGESTION	
5.1 Conclusion	103
5.2 Suggestion	105
REFERENCES	106