

Study Notes

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List of Abbreviations and Symbols

$Q_2(f)$ Two-side (bounded) error quantum query complexity. 13
 \mathbb{R} Real number. 13

Chapter 1

Preface

[Kit+02] [Chi09] Gaussian distribution Definition A.1 Definition A.1 Gaussian

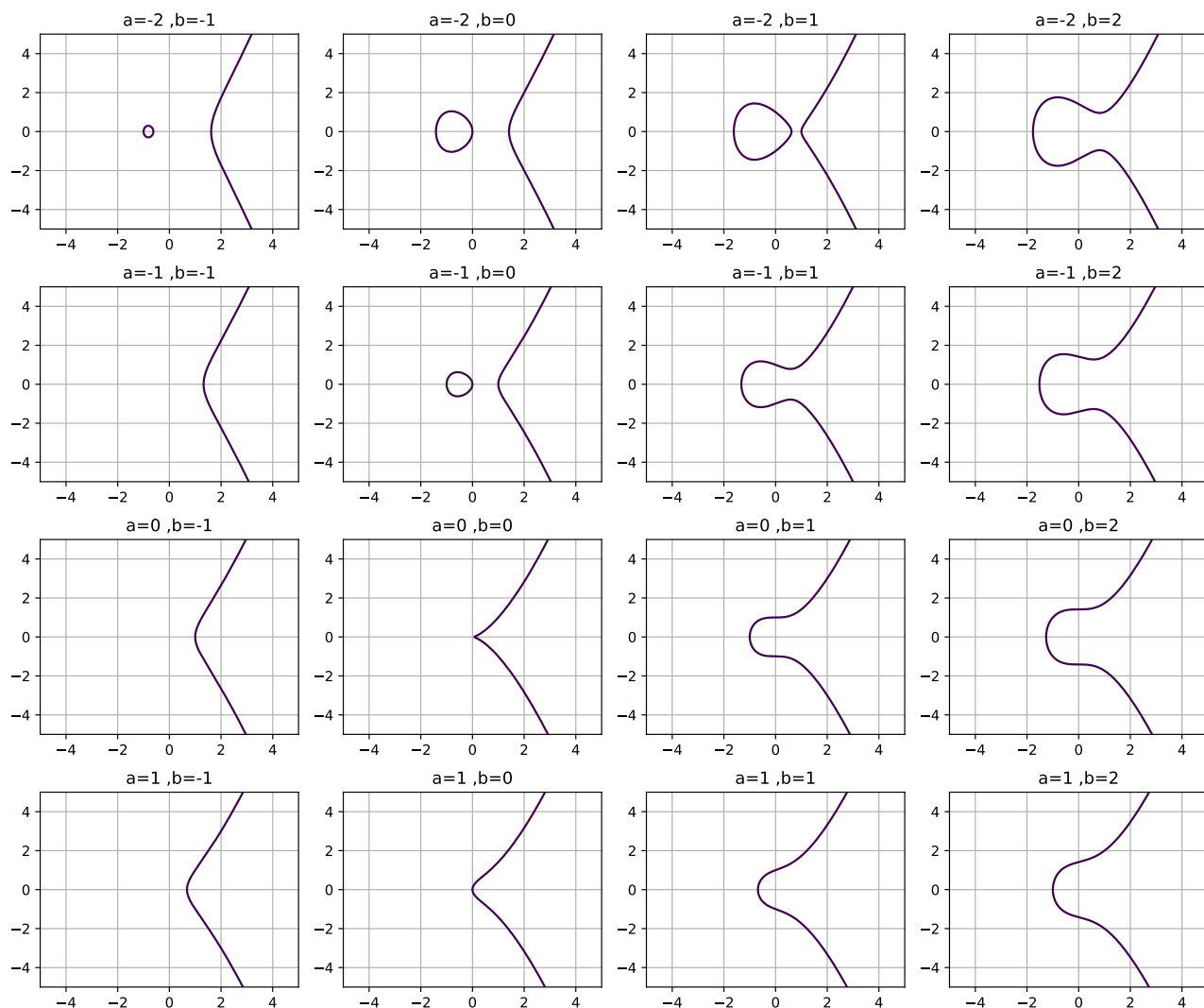


Figure 1.1

$Q_2(f) \mathbb{R}$

Part I

Mathematics

Chapter 2

Discrete Math

2.1 Proof

Part II

Computer Science

Part III

Physics

Appendix A

Formulas

A.1 Gaussian distribution

Definition A.1 (Gaussian distribution). *Gaussian distribution*

Theorem A.1 (Central limit theorem).

Bibliography

- [Chi09] Andrew M. Childs. *Universal Computation by Quantum Walk*. Physical Review Letters 102.18 (May 4, 2009), p. 180501. arXiv: [0806.1972](#).
- [Kit+02] Alexei Yu Kitaev et al. *Classical and quantum computation*. 47. American Mathematical Soc., 2002.

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Gaussian distribution, [23](#)