

PROBLEM SET 07: THE ABELIAN HIDDEN SUBGROUP PROBLEM

Exercise 0.1 (Recalling Definitions). Recall

- (i) Simon's algorithm
- (ii) the essence of Shor's algorithm.

Exercise 0.2. Explain, rigorously, how the abelian HSP works in analogy with the cyclic HSP.

Exercise 0.3. Read sections §2 and §3 of Kuperberg's paper, detailing out a review of the material. We will discuss dihedral groups next lecture, but the definition given by Kuperberg is enough to start.

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