HA2

1

Correct. [1]. (1.0)

2

Think it's correct, couldn't find any reference to explicit secret sharing. But first answer is really just references to slides without explaining so I will deduct 0.2 points. (0.8)

3

Correct[2]. (1.0)

4

This seems reasonable. Don't want to disclose votes unnecessarily[3]. (1.0)

5

Correct, accurate with the lecture notes[4]. (1.0)

6

Correct, good explanation[5]. (1.0)

7

Correct. The votes will be summed without knowing what's inside so it's important that it's only -1 or 1[7]. (1.0)

8

Correct[?]. (1.0)

References

- [1] https://en.wikipedia.org/wiki/Zero-knowledge_proof#Definition
- [2] https://en.wikipedia.org/wiki/Computational_hardness_assumption
- $[3]\,$ Lecture Notes for Advanced Web Security 2017. Part 3 Electronic Voting. Martin Hell, Section 4.1, Page 9

- [4] Lecture Notes for Advanced Web Security 2017. Part 3 Electronic Voting. Martin Hell, Section 4.2, Page 10
- [5] Lecture Notes for Advanced Web Security 2017. Part 3 Electronic Voting. Martin Hell, Section 4.3.1, Page 13
- [6] Lecture Notes for Advanced Web Security 2017. Part 3 Electronic Voting. Martin Hell, Section 4.3.2, Page 15
- [7] Lecture Notes for Advanced Web Security 2017. Part 3 Electronic Voting. Martin Hell, Section 4.1, Page 3