Homework Assignment 5

1. Diffusion in the Fourier basis (10 points): MM 15.35

2. Flip around the average (10 points): MM 15.36

3. Unknown number of solutions (10 points): MM 15.37

4. Collision problem (10 points): MM 15.38

(You don't need to do the first part that asks for a classical $\mathcal{O}(\sqrt{N})$ algorithm since we already discussed it in the context of Simon's problem.)