Problem: carefully write up Shor’s algorithm.

You need not prove that the classical components succeed in finding a divisor with high probability, but you should include the statements of the theorems/lemmas giving bounds for the probability of success.

For the quantum components of the algorithm, include all the relevant calculations and circuits, including (if you choose to implement it this way) the phase approximation and the quantum Fourier transform. You should describe how the circuits work, their complexity, and your calculations should demonstrate that the circuits perform as required by the algorithm.