1. A place to make notes on things from the Exam 2 specification that you should investigate:

- 2. What is the definition of the convex hull of a set of 2-dimensional points?
- 3. Describe the brute force Convex Hull algorithm.

4. Describe the "divide" part of the QuickHull algorithm. (Include P₁, P_n, S₁, and S₂ in your description)

5. How do we construct the upper hull from the set S_1 and points P_1 and P_n ?

- 6. How many numeric additions and multiplications are used to multiply two 2×2 matrices using the standard method?
- 7. How many numeric additions and multiplications are used to multiply two 2×2 matrices using Strassen's formulas?

8. Write and solve recurrence relation for straightforward divide-and conquer" matrix multiplication of two NxN matrices, where N is a power of 2.

9. Write and solve the recurrence relation for the number of multiplications in Strassen's algorithm.

10. Describe how Shell's Sort works.