

Any of the following exercises are fair game for your final oral exam. I suggest that you write up your solutions neatly in your own handwriting to consult during that exam!

Additional Reminder: You have an option of doing a project instead of doing the homework... so keep that in mind (and check the syllabus) if that sounds more appealing.

Problems Related to the Basics of Gaussian Widths

24. Do homework exercise 5.1.1 on page 181 of the notes (https://math.msu.edu/~iwenmark/Notes_Fall2020_Iwen_Classes.pdf).
25. Do homework exercise 5.1.2 on page 181 of the notes (https://math.msu.edu/~iwenmark/Notes_Fall2020_Iwen_Classes.pdf).
26. Do homework exercise 5.1.3 on page 182 of the notes (https://math.msu.edu/~iwenmark/Notes_Fall2020_Iwen_Classes.pdf).
27. Do homework exercise 5.1.4 on page 182 of the notes (https://math.msu.edu/~iwenmark/Notes_Fall2020_Iwen_Classes.pdf).
28. Do homework exercise 5.1.5 on page 182 of the notes (https://math.msu.edu/~iwenmark/Notes_Fall2020_Iwen_Classes.pdf).
29. Prove Lemma 5.1.8 on page 173 of the notes (https://math.msu.edu/~iwenmark/Notes_Fall2020_Iwen_Classes.pdf).
30. Do homework exercise 5.1.6 on page 182 of the notes (https://math.msu.edu/~iwenmark/Notes_Fall2020_Iwen_Classes.pdf).
31. Do homework exercise 5.1.7 on page 182 of the notes (https://math.msu.edu/~iwenmark/Notes_Fall2020_Iwen_Classes.pdf).