History of Mathematics   Math 629
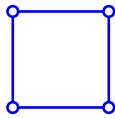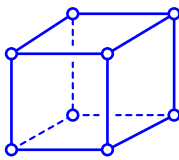
Thirteenth Homework: 25 April 2022
Due Monday 2 May 2022.

To hand in: We are using Gradescope for homework submission.

1. [10] Exercise 24.2.1

2. [15] Exercise 24.2.2

3. [10] Exercise 25.5.2

4. [10] Exercise 25.5.4

5. [15] Exercise 25.5.5

6. [20] After building your model of the 4-cube, complete the worksheet (on the next sheetof paper).

7. [20] Write a paragraph about what you we learned from the project.

Cubes Worksheet

d	d-Cube	v	e	f_2	f_3	f_4	f_5	Sum
0								
1								
2								
3								
4	[Your Model]							
5	[Your Mind]							
n	[Your Mind]							
d	d-Cube	v	e	f_2	f_3	f_4	f_5	Sum

What is the sum of the face numbers of a d-cube?

What about its face numbers? The second question is hard.

This is a picture of the Schlegel diagram of the four-dimensional cube. It is different from the model you just made.