

In addition to CDCL solvers and pseudo-Boolean solvers, we explored other promising tools like Gurobi, SageMath, and Unidom for solving the queen domination problem. Solving the problem using SageMath and Unidom is straightforward, each requiring only a single line of code. Therefore, the code for SageMath and Unidom is not included here. However, the code for solving the problem using Gurobi is available in the `code/` folder.

Beyond these tools, I also experimented with Z3 and OR-Tools. Since these were not part of the main experiments, their results are not reported here. However, I have included the code for solving the queen domination problem with OR-Tools for reference. Unfortunately, I misplaced my Z3 code, but it should be easy to adapt one of the available scripts, such as those for SAT solvers, Gurobi, or OR-Tools, to work with Z3.

Below is a summary of the results.

n	Unidom	SageMath	Gurobi
10	<b>0.2109</b>	0.3620	0.8300
11	<b>0.1774</b>	3.9500	2.3700
12	<b>0.2723</b>	38.9000	5.3000
13	<b>1.4959</b>	135	7.3900
14	<b>31.1642</b>	Time Out	34.59
15	1080.22	Time Out	<b>485.40</b>