It is a terrible day to be indoors! I am finishing last minute arrangements for the ACM Symp. on Computational Geometry, which we are hosting at Stony Brook starting Sunday might.

By the way, my favorite sequence which is not in your book begins:

2, 8, 12, 8, 16, 24, 20, 32, 18, 24, 40, 48, 28, 48, 60, 32, 32, 56 ...

and counts the frequency of the \$i\$th largest distance in an \(n\times n\) grid of points, for \(i < n\). In our paper:


Also, Report 89-18, Department of Computer Science, State University of New York, Stony Brook, June 1989.

We prove that that the frequency of \$i\$th largest distance for \(1 \leq i < n\) in an \(n\times n\) integer lattice is

\[\{2i; i不可以是完美正方形\}

\[
\lfloor\frac{\lceil i - 1 \rceil \left\lfloor 2 \sqrt{i} \right\rfloor^2}{4}\rfloor \lfloor\lfloor 2 \sqrt{i} \rfloor\rfloor^2\}
\]

The same question can be asked in higher dimensions. For cubic lattices, the sequence starts

4, 24, 36, 48, 48, 144, 32, 60, 192, 108, 144, 72, 240, 288, 192, ...

Steve Skiena