DEPARTMENT OF COMPUTER SCIENCE

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN URBANA, ILLINOIS 61801, U.S.A.

December 27, 1973

Dr. Neil J. A. Sloane
Rm 2C-363
Bell Laboratories
Murray Hill, New Jersey   07974

Dear Dr. Sloane:

    Shen Lin asked me to communicate to you the results of the
14×14 and 15×15 cases of the nonattacking Queens' problem.
These solutions were obtained by a student of mine, Steve R. Bunch,
as part of a project for a course on combinatorial computing. The
15×15 case took about 160 minutes on our 360/75. I have no idea
where the student got the money. The numbers are as follows

170=N775   N68= 2562

14×14	365 596	45 752
15×15	2 279 184	285 053

The first number is the total number of ways of placing nonattacking
Queens on a board, and the second, smaller number, is the number of
inequivalent ways.

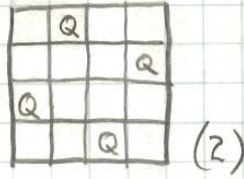   Your book sounds very interesting, and I am happy to communicate
this result to you.

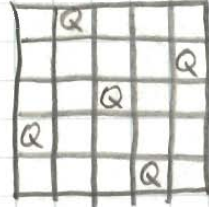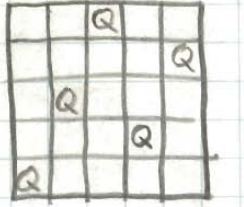Sincerely,

Edward M. Reingold
Assistant Professor

EMR:cs

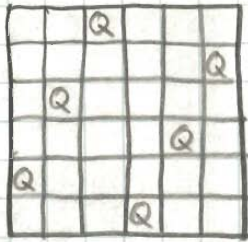answered

$q_4 = 2$

(2)

$q_5 = 10$

(8)

(2)

$q_6 = 4$

(4)

Fig. 5   Sequence 170, the problem of the queens.