

PROBLEM: The queen on the ACSL chess board is the most versatile piece. It can move at most N cells (where N is determined at the start of the game) in the following directions:

1. Left or Right to the borders of the chess board.
2. Up or Down to the borders of the chess board.
3. Diagonally to the borders of the chess board.

							(8,8)
			(5,4)				
(1,1)							

Since the queen can range in so many directions to capture an opponent's pieces, where can those pieces be safely placed? To make the program more interesting, two queens will be placed on the board. The ACSL chess board will be an 8 x 8 grid as labeled and shown above.

INPUT: There will be 5 lines of input. Each line will give the location of the queens as ordered pairs in row, column order and N.

OUTPUT: Print the number of locations where a chess piece is safe from capture

SAMPLE INPUT

1. 1, 2, 8, 5, 2
2. 4, 1, 6, 7, 3
3. 6, 3, 5, 6, 2
4. 3, 4, 3, 5, 1
5. 5, 1, 5, 8, 4

SAMPLE OUTPUT

1. 44
2. 31
3. 34
4. 52
5. 28

TEST DATA

TEST INPUT

1. 2, 2, 3, 6, 1
2. 3, 3, 5, 5, 1
3. 1, 8, 4, 2, 2
4. 5, 1, 8, 4, 3
5. 6, 4, 4, 6, 3

TEST OUTPUT

1. 46
2. 47
3. 43
4. 38
5. 27