

Suppose we have a 3 by 3 chess board instead of an 8 by $8-$ which rectangles can we make?
(Squares are included as a special kind of rectangle.)
So for example we can include:

a) How many rectangles can we make in total? [6 marks]
b) What about for a 2 by 2 board? [ 2 marks]
c) For a 1 by 1 ? [1 mark]
d) For a 4 by 4? [2 marks]
e) For a 5 by 5? [2 marks]
f) Can you come up with a general rule for the total number of possible rectangles for an n by n board? [7 marks]

