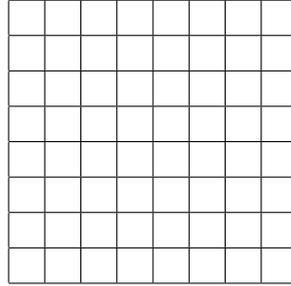


## DISCUSSION FOR SEVENTH TUTORIAL

DATE: JANUARY 16, 2011 OR JANUARY 23, 2012 : DUE IN TUTORIAL JANUARY 30 OR FEBRUARY 23, 2012



Consider an  $8 \times 8$  grid of squares above.

- How many squares does the grid contain?
- How many rectangles does the grid contain?
- How many rectangles that are taller than they are wide does it contain?

Now consider these same questions for an  $n \times n$  grid and an  $n \times m$  rectangular grid as well. Consider other generalizations either to other shaped grids or other conditions on the rectangles and squares.