

# Squares

**Problem 1.** In each of the following figures, find the total number of intersections made by the dotted lines. Then find the total number of rectangles formed by the dotted lines. Do you see any pattern to the progression? Do you see a relationship with the line problem? If so, explain what is going on.

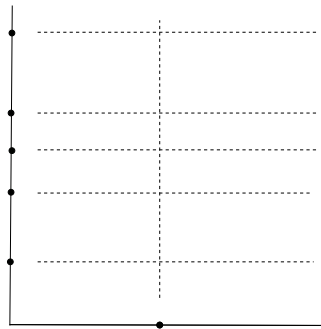


Figure 1: Number intersections :      Number Rectangles:

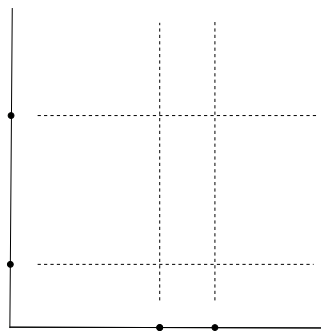


Figure 2: Number intersections :      Number Rectangles:

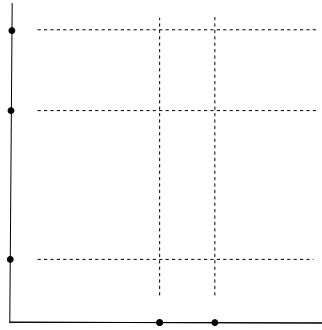


Figure 3: Number intersections :      Number Rectangles:

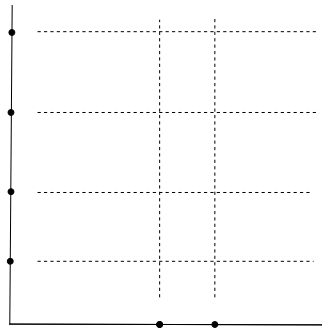


Figure 4: Number intersections :      Number Rectangles:

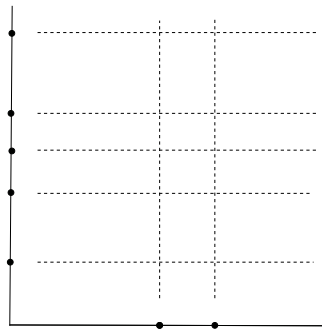


Figure 5: Number intersections :      Number Rectangles:

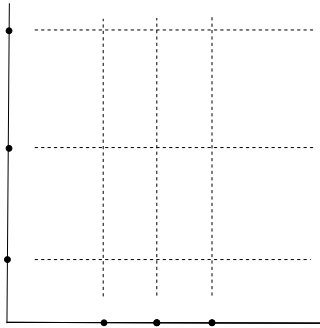


Figure 6: Number intersections :      Number Rectangles:

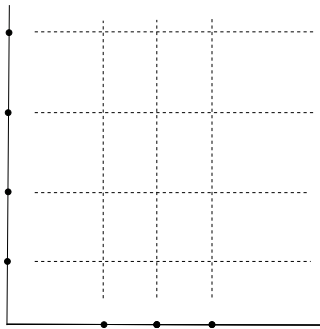


Figure 7: Number intersections :      Number Rectangles:

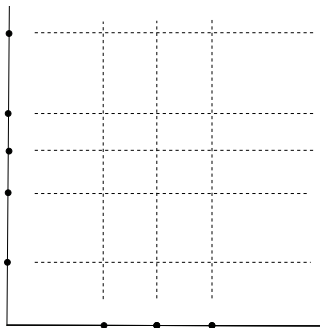


Figure 8: Number intersections :      Number Rectangles: