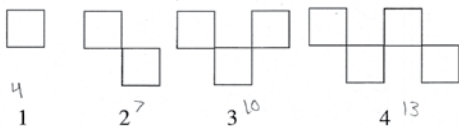


#3

Squares and Vertices Problem

How many vertices (corners) are there in 1, 2, 3, 4, ..., 100, ..., n squares when they are arranged in the following way?



= 34

Sample 1

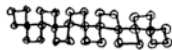
- I know that we need to find ten vertices.
- I also know we need to find a pattern.
- I know the vertices are the corners of the squares

I will try to do some patterns like they did in the paper. I will try to follow this pattern until I get ten blocks.

3-25-06
Math Lab Pg
#3



How many vertices are in 1 2 3 4 ... 10 squares arranged way?



My answer was 31 vertices

$$4 + 3 + 3 + 3 + 3 + 3 + 3 + 3 + 3 + 3 =$$

31 Vertices

What I did was I first tried to find the pattern and then I just kept doing the pattern until I had 10 blocks. I had to add 3 to every square. That was the pattern. I started with 4 and ended with 31 which was the answer.

Sample 2