- 1. Examine the following figure. Then show that $\sum_{i=1}^{n} (2i + 1) = n^2$
- X
 X
 X
 X
 X
 X

 X
 X
 X
 X
 X
 X
 - x x x

9

- x x x x
- $X \quad X \quad X \quad X$

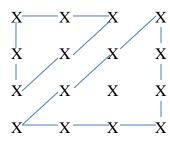
1 4

16

- 2. Use (1) to show that $\sum_{0 \le i \le n} i = n (n+1)/2$
- 3. The Greeks were also interested in triangular numbers. Two consecutive triangular numbers make up a square.

X





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Show that the n^{th} triangular number is n(n+1)/2

- 4. Problem #5 from your book page #8
- 5. Problem #12 from your book page #8
- 6. Problem #2 from your book page #17