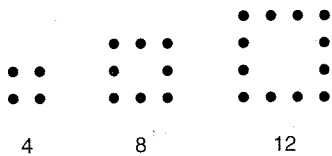


Shown below are the first three squares in a pattern. Each square has one more dot on each side than the previous square.



- How many dots are there in the fourth square?
- How many dots are there in the 50th square?
- Write an algebraic expression for the number of dots in the  $n$ th square.

d. let  $D_n =$  the number of dots in the  $n$ th square. Graph the relationship between  $D_n$  and  $n$ .

e) Write a rule for determining  $D_n$  given any  $n$ .