

Name: **ANSWERS!**

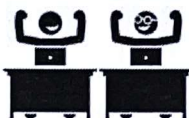
Class:



Communication



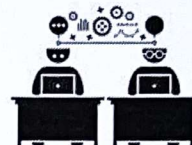
Successful Partnership



Encouragement



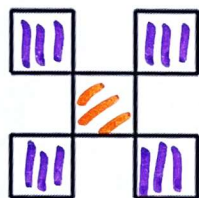
Solving Problem Together



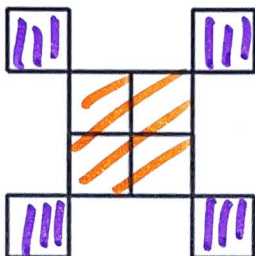
Collaboration

Question 01

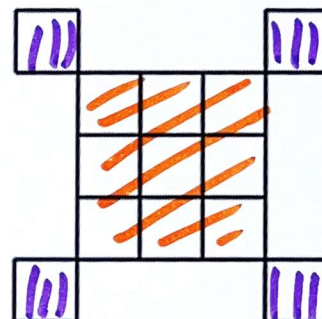
Write a quadratic function where $a(n)$ is the total number of blocks and n is the step number.



Step 1



Step 2



Step 3

one square increasing

\downarrow
 n^2

zero lines increasing

\downarrow
 $0n$

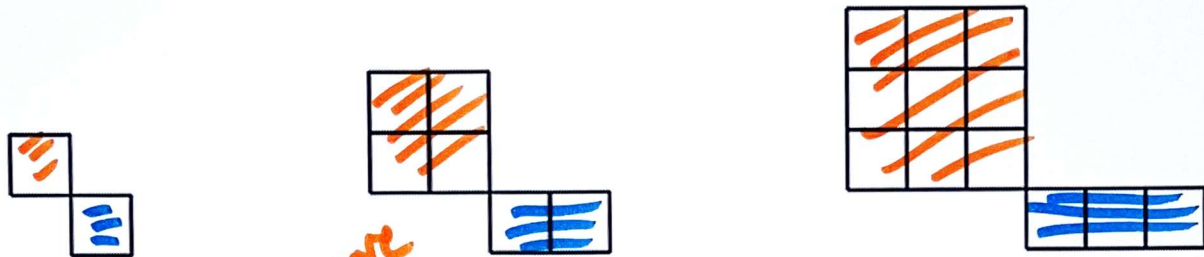
constant

\downarrow
4

$$a(n) = n^2 + 4$$

Question 02

Write a quadratic function where $b(n)$ is the total number of blocks and n is the step number.



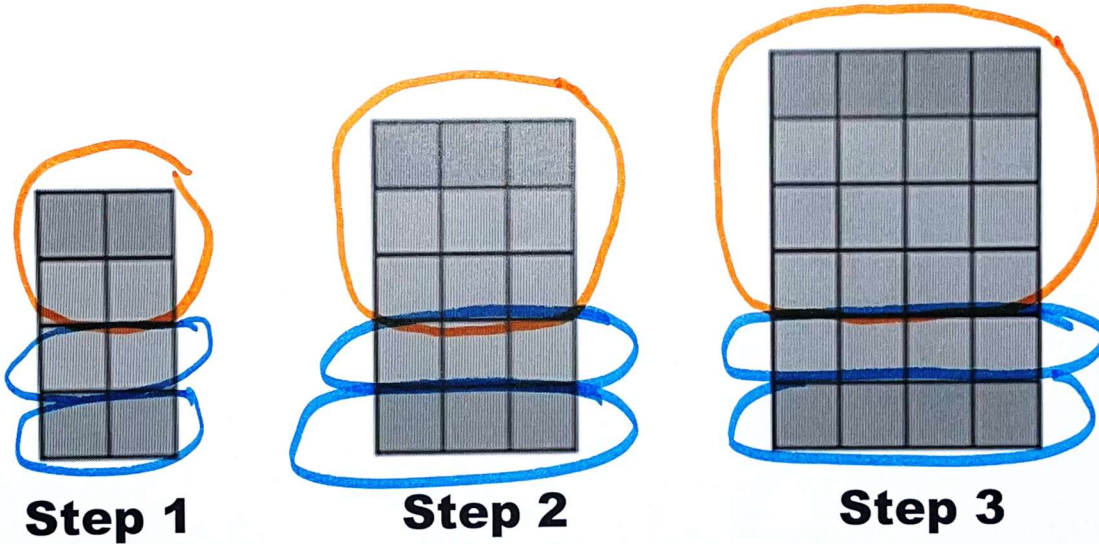
Step 1 *one square increasing* **Step 2** *one line increasing* **Step 3**

$n^2 + n + 0$ & constants

$a(n) = n^2 + n$

BONUS

Write a quadratic function where $c(n)$ is the total number of blocks and n is the step number.



$(n+1)^2 + 2(n+1)$
 $n^2 + 2n + 1 + 2n + 2$
 $a(n) = n^2 + 4n + 3$