

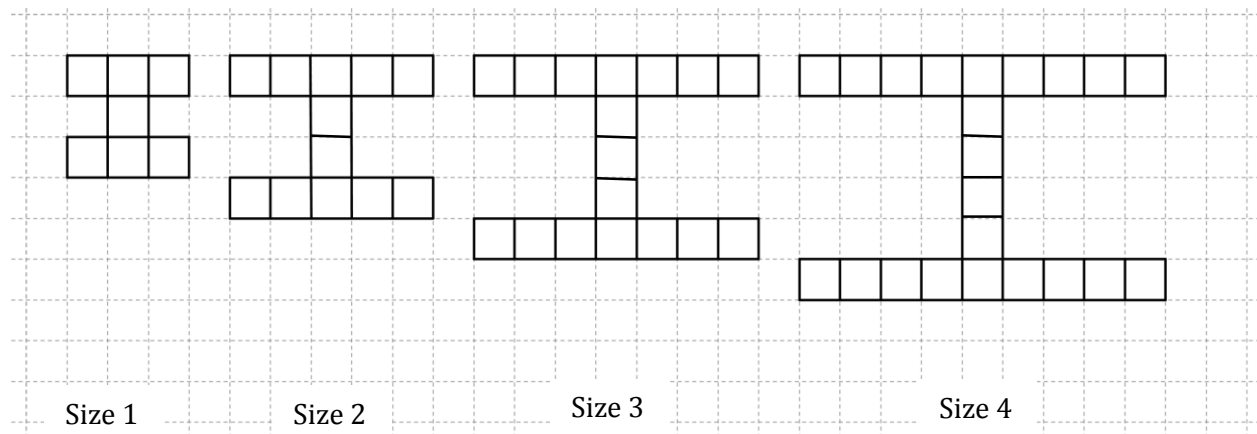
## 1.2 I Rule!

### *A Solidify Understanding Task*

Marco has started a new blog about sports at Imagination High School (mascot: the fighting unicorns) that he has decided to call "I Site". He created a logo for the web site that looks like this:



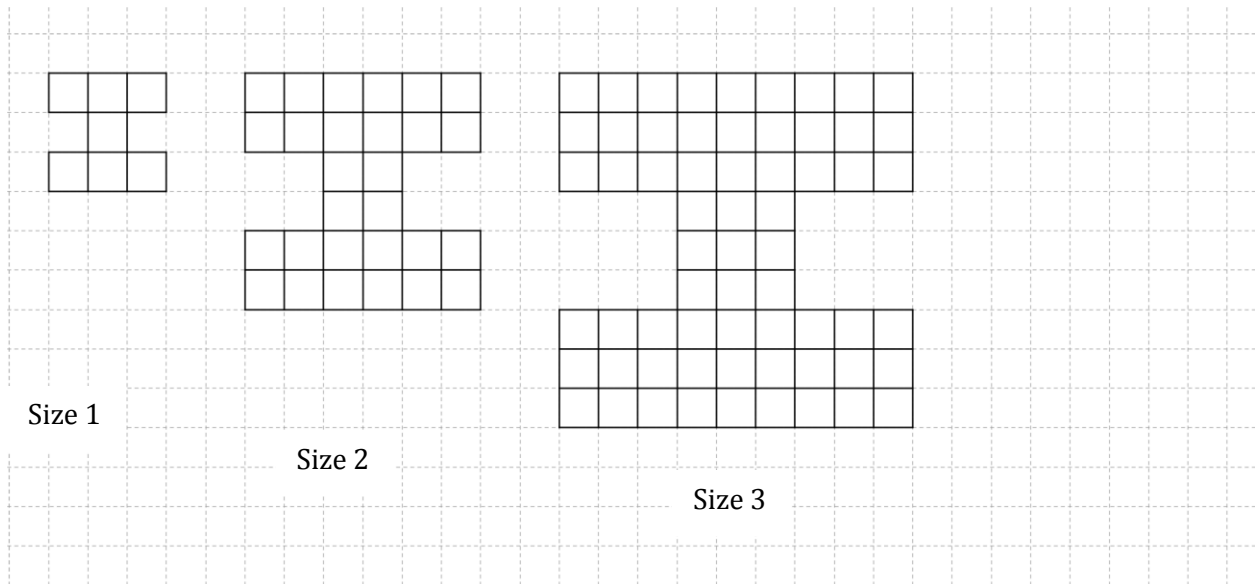
He is working on creating the logo in various sizes to be placed on different pages on the website. Marco developed the following designs:



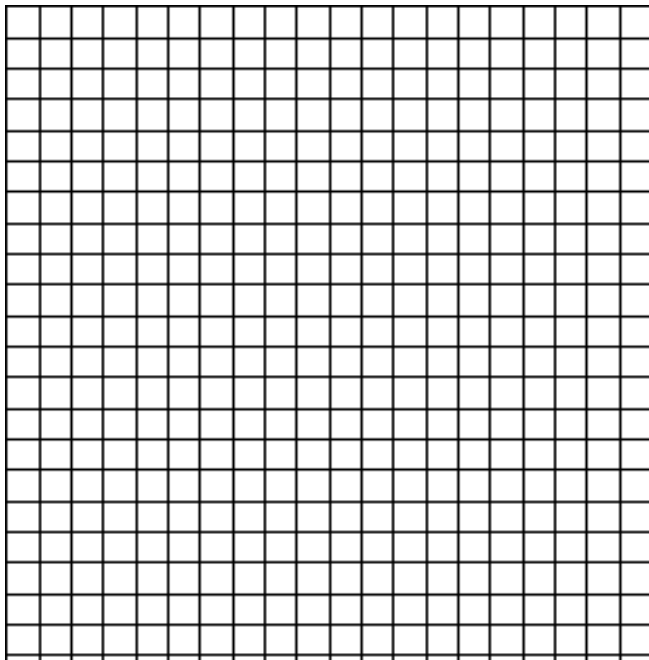
1. How many squares will be needed to create the size 100 logo?
2. Develop a mathematical model for the number of squares in the logo for size  $n$ .



Marco decides to experiment with making his logo “blockier” so that it looks stronger.  
 Here’s what he came up with:



- Assuming that Marco continues with the pattern as it has begun, draw the next figure, size 4, and find the number of blocks in the figure.



4. Develop a mathematical model for the number of blocks in a logo of size  $n$ .
  
  
  
  
  
  
  
  
  
  
5. Compare the models that you developed for the first set of logos to the second set of logos. In what ways are they similar? In what ways are they different?

