

3. What is the relationship between the number of squares in Figures 1 and 2? What about Figures 2 and 3? Figures 3 and 4? What is the pattern?

Exercise

Consider the sequence of figures below, and assume the pattern continues.



Figure 1

Figure 2

Figure 3

Figure 4

1. What does Figure 5 look like? Draw it out. How many squares are in Figure 5? Illustrate on your picture how you are grouping the blocks to count them, and write down the mathematical work you used to get the answer. *Avoid counting one-by one.*
2. Start by filling in the first five rows of the table below. In the column for *Work*, show the arithmetic for how you are computing the number of squares. Then look for a pattern in the table, and use it to determine the number of squares in Figure 20 without actually drawing Figure 20.

Figure Number	Work	Number of Squares
1		
2		
3		
4		
5		
⋮	⋮	⋮
20		

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