

Chapter 4 Extra Credit

All work is to be done on separate pieces of paper!

Section One: (2 points)

1. Based on the tile pattern below, draw Figures 0, 4, and 5. Then find a rule that will give the number of tiles in any figure and use it to find the number of tiles in Figure 100. Finally, display the data for the first six figures (numbers 0-5) in a table and on a graph.

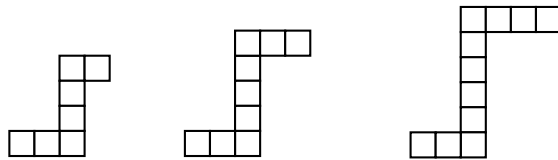


Fig. 0

Fig. 1

Fig. 2

Fig. 3

Fig. 4

Fig. 5

2. Based on the tile pattern below, draw Figures 0, 4, and 5. Then find a rule that will give the number of tiles in any figure and use it to find the number of tiles in Figure 100. Finally, display the data for the first six figures (numbers 0-5) in a table and on a graph.

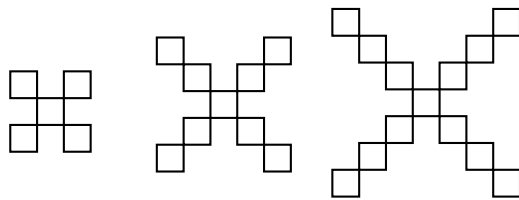


Fig. 0

Fig. 1

Fig. 2

Fig. 3

Fig. 4

Fig. 5

Section Two: (3 points)

For the next problems, choose 2 other representations to show the pattern presented.

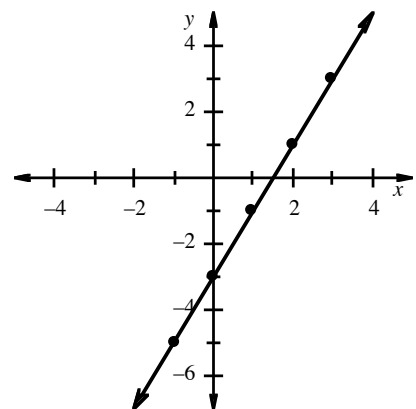
3.

input (x)	-3	-2	-1	0	1	2	3	4	5
output (y)	-11	-8	-5	-2	1	4	7	10	13

4.

input (x)	-3	-2	-1	0	1	2	3	4	5
output (y)	10	8	6	4	2	0	-2	-4	-6

5.



Section Three: (4 points)

For each word problem, write an equation and solve the equation. Be sure to do a check step afterwards.

1. When you multiply my number by four and add six, the result is fifty.
2. The sum of twice my number added to forty-two is one hundred thirty-eight.
3. Three times my number lessened by my number has a result of twenty-four.
4. The sum of my number and one is added to my number to get a result of seven.