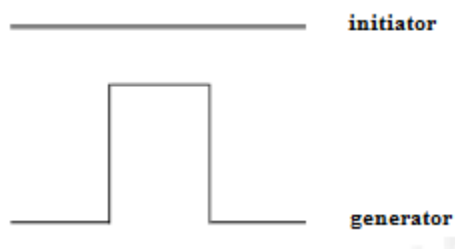


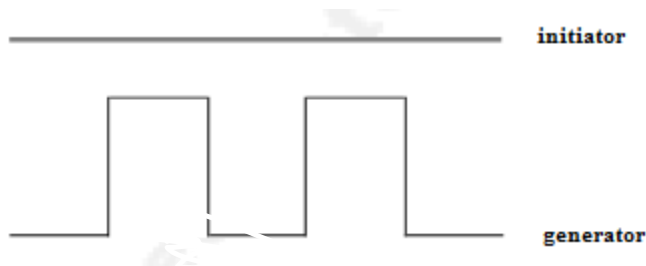
## Math 116: Written Homework Set 6

**This assignment is due on Friday, October 20<sup>th</sup> in class. Show all work where possible! Answers magically appearing will receive no credit.**

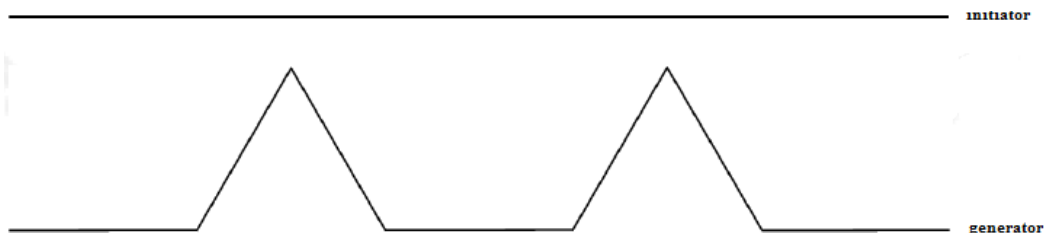
1. Find the dimension of a fractal with  $r = 4$  and  $N = 5$ . Round to the nearest hundredth.
2. The initiator and generation of the fractal are shown below. Find the dimension of the fractal. Round to the nearest hundredth.



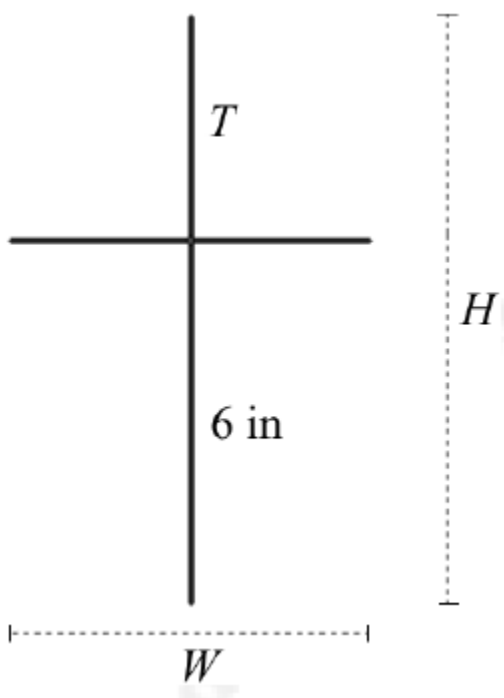
3. The initiator and generation of the fractal are shown below. Find the dimension of the fractal. Round to the nearest hundredth.



4. The initiator and generation of the fractal are shown below. Find the dimension of the fractal. Round to the nearest hundredth.



5. Suppose one dimension of a Golden Rectangle is 10 in. Find the two possible values for the other dimension of the Golden Rectangle. Round your answers to the nearest tenth.
6. Find the width and length (rounded to one digit to the right of the decimal place) of the Golden Box if the height of the box is  $H = 8$  cm.
7. Assuming that the cross shown is a Golden Cross, find the values of  $T$ ,  $H$ , and  $W$  given that  $B = 6$  in. Round your answers to the nearest tenth



**Selected Answers**

1.  $d \approx 1.16$

3.  $d \approx 1.37$

5. One possible dimension value is 16.2 in.

7.  $T \approx 3.7$  in