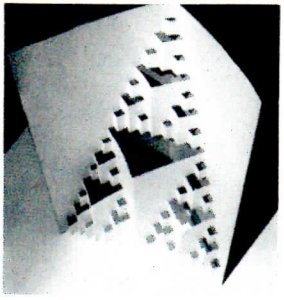


Name: _____

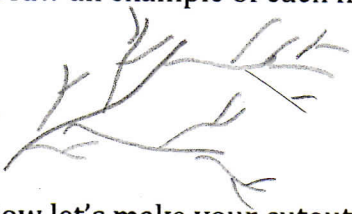
Fractal Cutout Cards

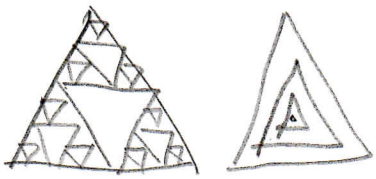
1. What is a fractal? include some of the following- pattern made up of lots of different-sized copies of the same pattern; repeated pattern that grows or shrinks

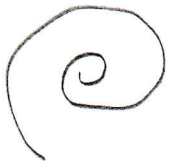
2. What are four types of fractal patterns?

a) branching b) geometric c) spiral d) algebraic

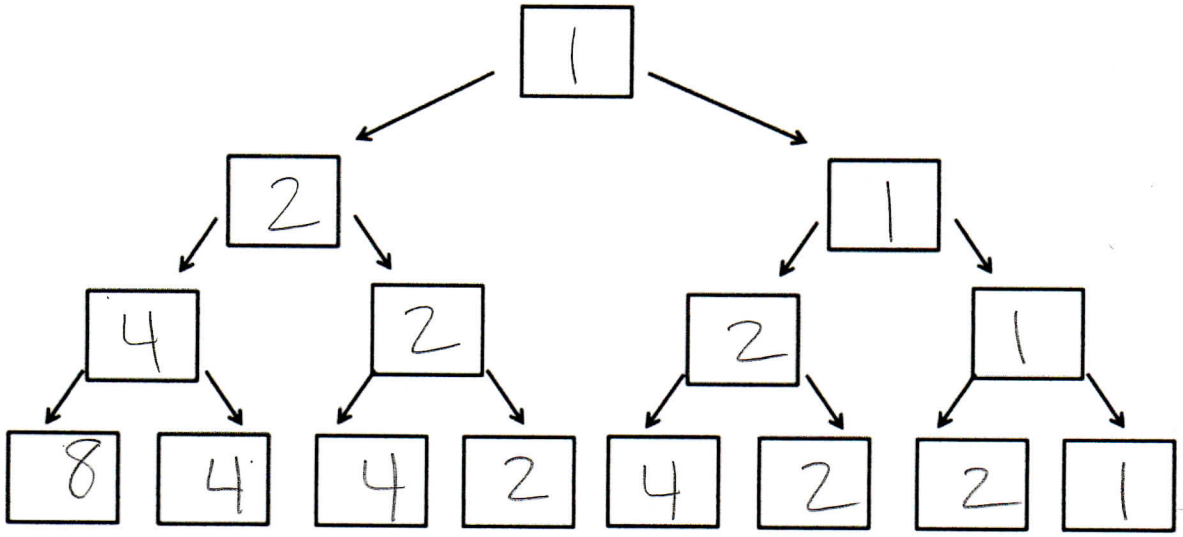
3. Draw an example of each fractal pattern that you don't need a computer to draw.

a) 

b) 

c) 

4. Now let's make your cutout card and look at the mathematical pattern behind it. Complete your first set of "cut, fold and invert." In the top box, write the number of inverts you did.

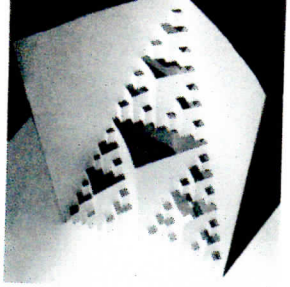


Now, do your second set of "cut, fold and invert." In the second set of boxes, fill in how many sets of inverts you did, with the larger number on the left and smaller number on the right.

Do your third set of "cut, fold and invert." In the third set of boxes, fill in how many sets of inverts you did, with the largest number on the left and smallest number on the right.

Continue until you are done. What mathematical pattern do you see in the numbers?

Each time, you're multiplying by 2 on part and keeping the same number on the other part.



Name: _____

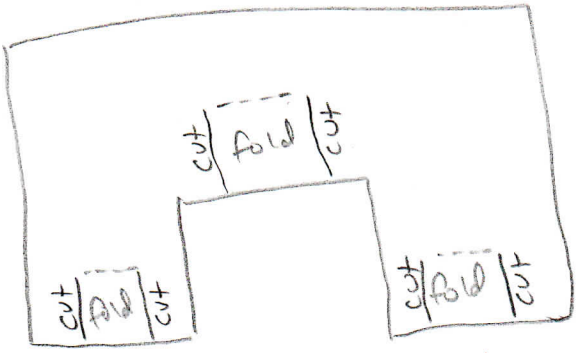
Fractal Cutout Cards

one option →

5. What other cutout cards can you create? Describe the cutting procedure here and draw out the mathematical patterns that you see.

(1)

(2)



(3)