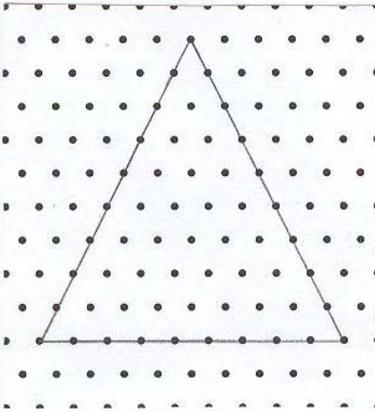


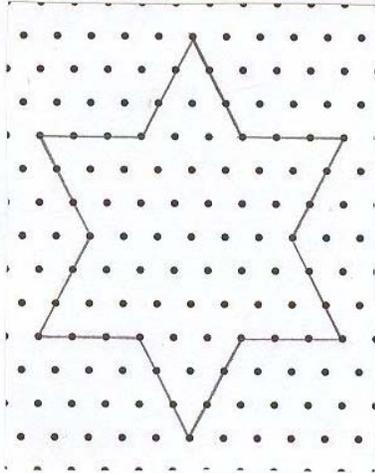
The Koch Snowflake

These are the first three stages in creating the Koch snowflake. Fill in the perimeters. Let every space be equal to one unit.

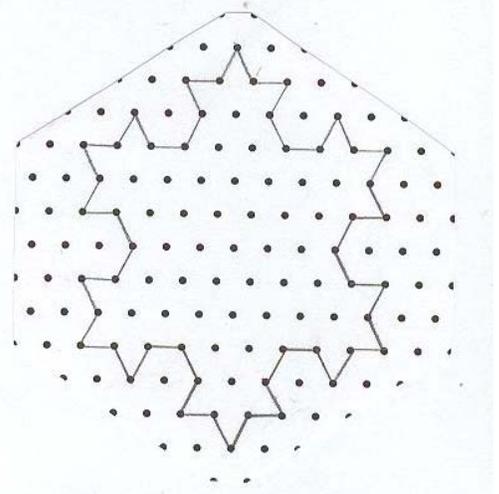
Stage 1



Stage 2



Stage 3



Perimeter at Stage 1

.....

Perimeter at Stage 2

.....

Perimeter at Stage 3

.....

At each stage, every old side is replaced with how many new sides ?

The length of each new side is what fraction of the length of the old side?.....

What is the perimeter of stage 2 divided by stage 1?.....

What is the perimeter of stage 3 divide by stage 2?.....

Can you predict the length of the perimeter at stage 4?.....

What is the general rule for the length of the perimeter at stage n?.....

What will happen to the length of the perimeter if we keep repeating this process for ever ? (To form the limiting shape)

.....

What do you think will happen to the area as we keep repeating this process?

.....