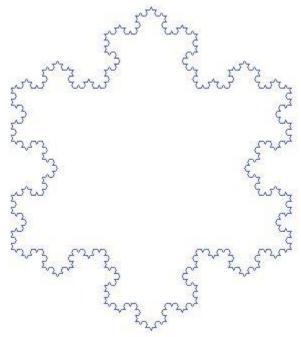
Koch Snowflake

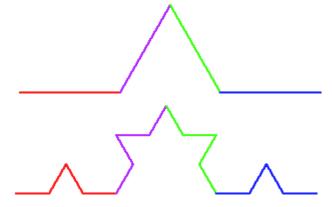
Using recursion we can make beautiful things! In this step we'll learn to make the beautiful Koch snowflake (below)

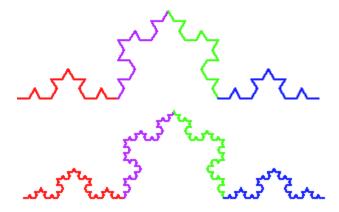


We're going to work with fractals that do not return to the same place between recursive calls. For example, our base case has the character start on the left and go to the right (below).



Then at every successive level, it repeats the previous level 4 times in a pattern shown below. Look at the images below to see how the previous level is repeated in each higher level.





Something that is hard to tell visually is that each recursive call is one-third the size of the previous step. Fill in the blanks in the following recursive function to draw the Koch snowflake. Note that at the end of each recursive call we do not end where we started like we did with the trees.

```
snowflake size: size and level: level

if

move size steps
else

snowflake size: and level: turn $\$60 degrees

snowflake size: and level: turn $\$120 degrees

snowflake size: and level: turn $\$60 degrees

snowflake size: and level: turn $\$60 degrees

snowflake size: and level: and level: turn $\$60 degrees
```

When you get one side of the snowflake working, combine three of these to actually make the snowflake.