

In-Class Exercise: Determine the length of Koch's snowflake.

STUDENT NAME:

January 4, 2016

Figure 1 shows the first four iterations of Koch's snowflake. Your job is to determine whether the total length of the curve is finite or infinite.

Starting at iteration 0 with an equilateral triangle with a side length of 1, calculate the total length of the curve for each iteration. Hint: The total length is always three times the length of each side, so just calculate the length of each side for each iteration and multiply the result by 3.

Solution

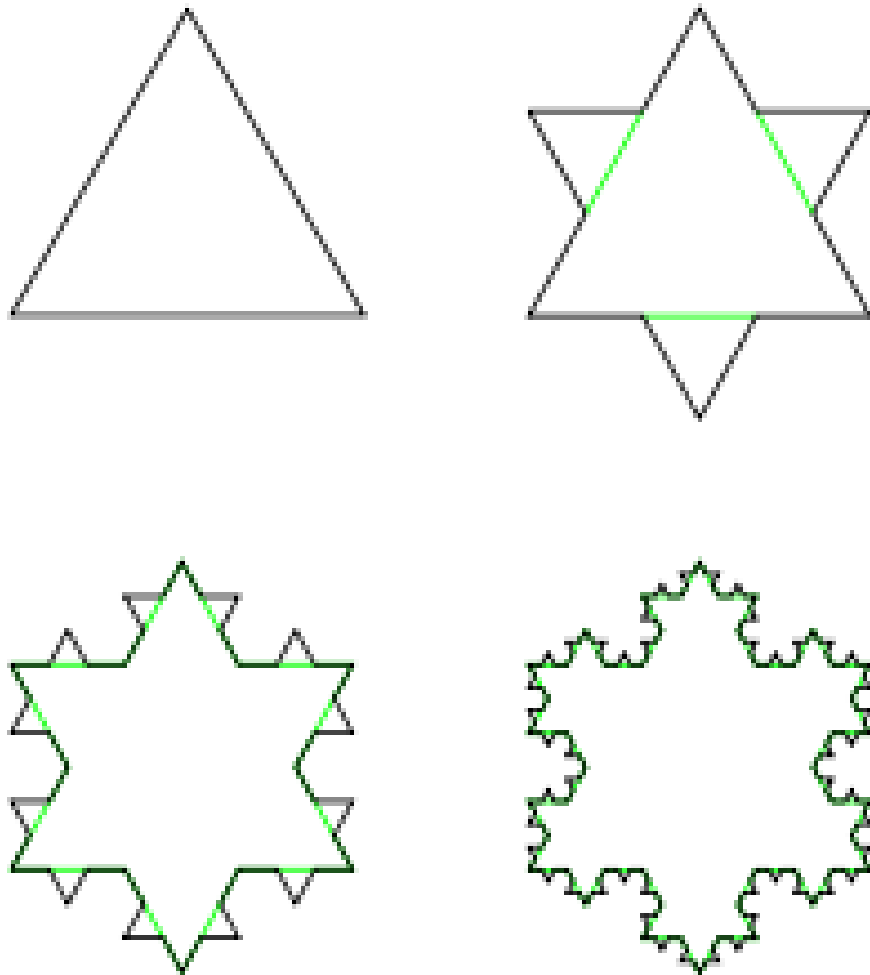


Figure 1: Four iterations of Koch's snowflake.