CS10 With-Snap! Midterm (Fall 2018, Sec 1)

Below are screenshots of the first four iterations of a beautiful fractal. Write code that generates the fractal (you don't have to match our exact placement on the screen), and name it FractalYourfirstnameYourlastname.xml (e.g., FractalAlanTuring.xml). Also, save a PNG image of the fifth (n = 5) iteration and name it similarly, (e.g., FractalAlanTuring.png). To save a PNG image of the stage, right-click (or control-click) on the stage and choose "pic...", then in the new tab right-click (or control-click) the image and save the file to the Desktop. Submit both on bCourses under the "with-Snap!" midterm assignment for the lab section you are in.

Though this may look daunting at first, it isn't that bad. Remember, every fractal has a base case (n = 1) and recursive case. We've drawn the fractal with **bold** lines to indicate the parts of the drawing that recurse; the other parts of the drawing at n = 2 are just lines. (You don't have to copy our bold/normal style, it's ok if it's all the same.) Look at how the straight line at n = 1 transforms into the n = 2 case – this happens for every bold line at the next level. The <u>four</u> n = 2 lines are 1/3 the length of the n = 1 line. Also, the sprite turns 60°, and ends facing the same way it began.

