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|  | **Rochester Institute of Technology**  **Golisano College of Computing and Information Sciences**  **School of Interactive Games and Media**  **2145 Golisano Hall – (585) 475-7680** |  |

**Data Structures & Algorithms for Games & Simulation II**

**IGME 309, 2015 Spring**

**E11: Sierpinski Triangle**

For this in-class exercise you are asked to generate a Sierpinski Triangle (in 2D to keep it simple) on to its 3th recursion (though you can come up with a method to create any iteration number).

Restrictions:

You can only call the graphics card once (implying that you need to use instance rendering)

You need to create at least 3 recursions (meaning you will have something like a set of 3 triforces)

Useful links:

<https://en.wikipedia.org/wiki/Sierpinski_triangle>

<http://ed.ted.com/lessons/the-mathematical-secrets-of-pascal-s-triangle-wajdi-mohamed-ratemi>

No starter code is provided but there are three particularly useful projects in the ReEngine repository.

Show the work to the TA or professor and upload it to the designated dropbox.

Your solution should look like the tip of the following screenshot (the first 9 triangles) but if you make it programmatically you can make something like this:

