For my project, I decided to make the frame of a bicycle that I wanted when I first got into mountain biking. Even though it’s been a few years, This bike always reminds me of the early days of my love for cycling. The bike is a Diamondback Mason 29er.
The main feature that I used in making this product were guided lofts, extrudes, and extrude cuts. I started with a 2D sketch of the front and rear triangles. Then, starting with the front triangle, I extruded sketches on planes spaced out on each leg of the triangle. The main process I would use is to first find a plane to draw on, then use guided lofts and extrudes to make the sketches 3D according to the original 2D sketch.

The hardest part of the process was to make the rear triangle due to all the different curves that I had to measure and sketch out to make it look like the original bike. I definitely learned a lot about solidworks over the course of this project. I became a lot more comfortable with the software. For example, I now know about guided lofts, how to color an object, pack and go, and to make drawings. I actually really enjoyed our time spent on Solidworks.