

Wednesday Challenge Form

Group Members: Edgar, Nicholas, Arthur, Armen

Problem Statement: We were given a 5' by 5' board and had to cut out boards that were 10" wide and had a length $32'' < L < 46''$. It had to be easy to cut, all the same size, and the goal was to minimize waste as much as possible.

Approach: First, we brainstormed some ideas on what we were going to do. We started off by making the boards 40" by 10". Our sketch had 6 boards side by side on the bottom of the sheet, and then two boards on top laid across. It left a 20" by 20" square of waste, which ended up being 200 square inches of waste. Then, we came up with another idea that used boards that were 46" by 10". After fitting it all into the 5' by 5' sheet, it left 380 square inches of waste. This was 20 square inches less than our original design, so we went with that one.

Solution: Mr. Neat preferred the groups to use SketchUp for this Wednesday Challenge and Evan and co. won because they thought about the thickness of the blade.

Lessons Learned: If I were to do this again I would have considered the thickness of the blades cutting the board.