

Date:1/8/15

Wednesday Challenge Form

Group Members: Ara david and sumin and shae

Problem Statement: design a way to make as many skate boards with a five by five piece of wood.

Approach: we decided on mathematically modeling how many skateboards to make. We discovered that the usable area was going to be a percentage of how many skate boards could possibly be made. Seven was the magic number! SO we made the simplest possible design. Then we said that in order to make it a saw would cut an area near the intersection of each board. Imagine you had two circles that were intersecting at one point. if you were to cut through the point to separate the circles, the saw would flatten the two circles near that point at around half of the width of the saw blade. If this produces a negligible discrepancy in the width, then that same distance would be the discrepancy in the possible board that would be cut near the bottom considering that the shift we are hypothesizing would only be length of half of a sawblade.

Solution: A simple design is always the best
And it seemed this way for this competition.

Lessons Learned: Overthinking a design may
Open more problems than solving.