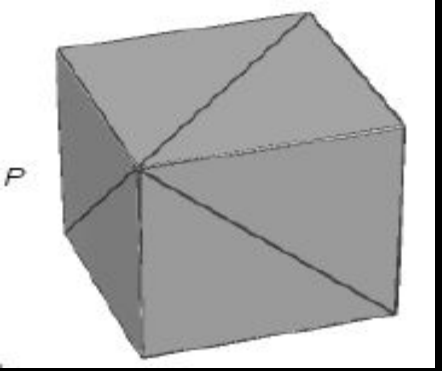


Yangma

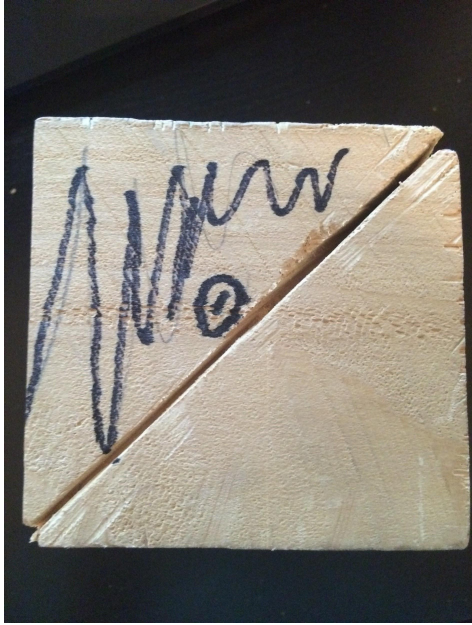
A Presentation for Dr Drew’s Class

The Project

- Make an accurate, sharp Yangma that has dimensions of 6x6x6
- Be able to demonstrate that it works

The Project, Revised

- Make markings of 3.5x.3.5x.3.5 instead
- Cut out, draw dimensions.
- Triangle I, shaded area is an area shared between two cuts



Triangle 2

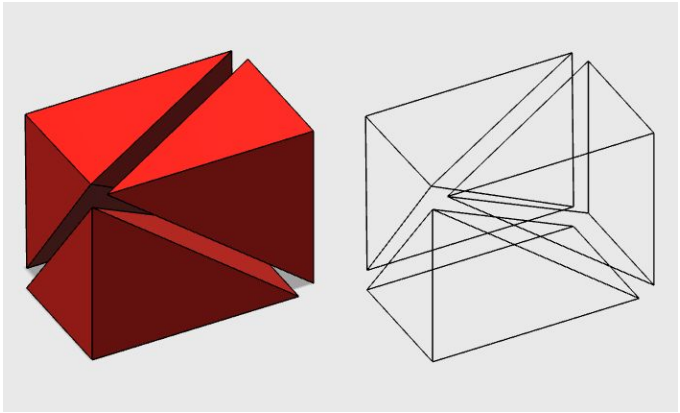
- Process of cutting

Triangle 3

- Process of cutting

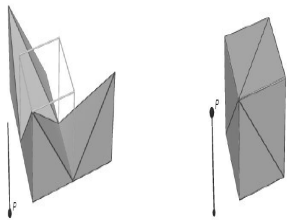
Calculations

- A good yangma must be even, with all sides equally sharp and straight
- This makes sure it is able to be completely to shape
- In order to do this, I had to use the dimensions of 3.5x3.5x3.5 - 3.5 inches for length, 3.5 inches for width, and 3.5 inches for height



The Process

- Makerspace - finding a brick of wood lying around
- Making the markings for a 3.5x3.5x3.5 cut, and cutting the piece out
- Assembling the triangles by slicing the cube into 3 equal parts - since we have a base of 3.5, a height of 3.5, and a length of 3.5 to make our cube, we know that we have our volume as $a \times a \times a = a3$. This would make it follow that the volume of each of these yangmas is $a3/3$.



Area

- Area = a^2
- = 3.5^2
- = 12.25

Reflection, Successes and Disasters

- Finishing the cube, a promise and a theft
- Some successes I had were immediate - having the supplies and the math present and done on the first day made the rest of this a breeze.

End

Thanks for watching! Any questions?