

## RobotEx Application Project

### Pyramid Accessory Holder



Tired of searching through baskets and drawers for hairpins, bows, and clips? You can't find the lotion again? There is hope yet, for the Pyramid Accessory Holder might be able to help you. It has three shelves including its base, it is light weight, and can hold most accessories as mentioned above. Below are instructions to show you how to make your own.

#### General Measurements of Pyramid:

- Height: 24"
- Base Edge: 24"
- Slant Height: 29.39"
- Diagonals: 33.94"
- Center of Base to Edge of Base: 16.97"

#### Materials Needed

- 4 -1/2"by 36"by 1/2" wooden rods (Found at Hobby Lobby)
- 1 -24"by24"by 1/2" poster board with about 1"by1"by 1/2" extra
- 2- Cardboard boxes
- 4 -Nails
- 1- Bottle of strong foam glue (I used Aleen's Original Tacky Glue)
- 1- Box cutter
- 1-Pair of thick gloves
- 1- Hammer

### Steps:

1. Trim the four rods to a length of approximately 29.39".
2. Use the extra poster board mentioned in the materials list to cut out four triangles with the sides 2 ½", 3 ½", and 2" long.(Fig.1)
3. Take the four wooden rods and align each with one triangle on the 2" long side. To get a better understanding look at Fig.2. Then, hammer in a nail through the wood and into the triangle about ½" above the end of the rod lined up on the 2" side. Fig.3 shows this.
4. Then, using the glue, glue the triangles with the rods on them on to each corner of the base. The 3 ½" side should be the one glued down(Fig.4). Also, add a little glue to the rod ends at the apex and press them together so they don't move around.
5. Get an 8" by 8" piece of thin, sturdy cardboard. Fold each corner over about ½ ". Place a bit of the glue on the backside of each folded corner and snugly stick the corners of the board to the rods 8 inches from the apex. Do the same thing for a 14"by 14" cardboard piece, placing it about 14" from the apex. Look at Fig. 5-9for better understanding. In the pictures thick paper is used instead of cardboard as a prototype.
6. Wait till the glue has dried before placing accessories on the top two shelves.

Pictures

Figure 1



Figure 2



Figure 3

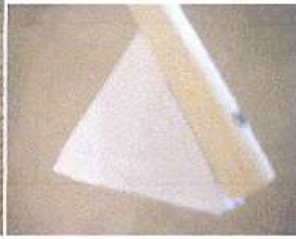


Figure 4



Figure 5



Figure 6



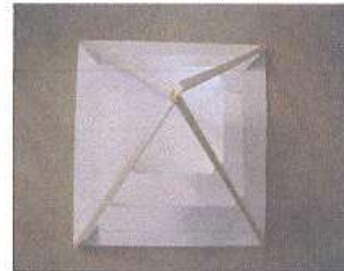
Figure 7



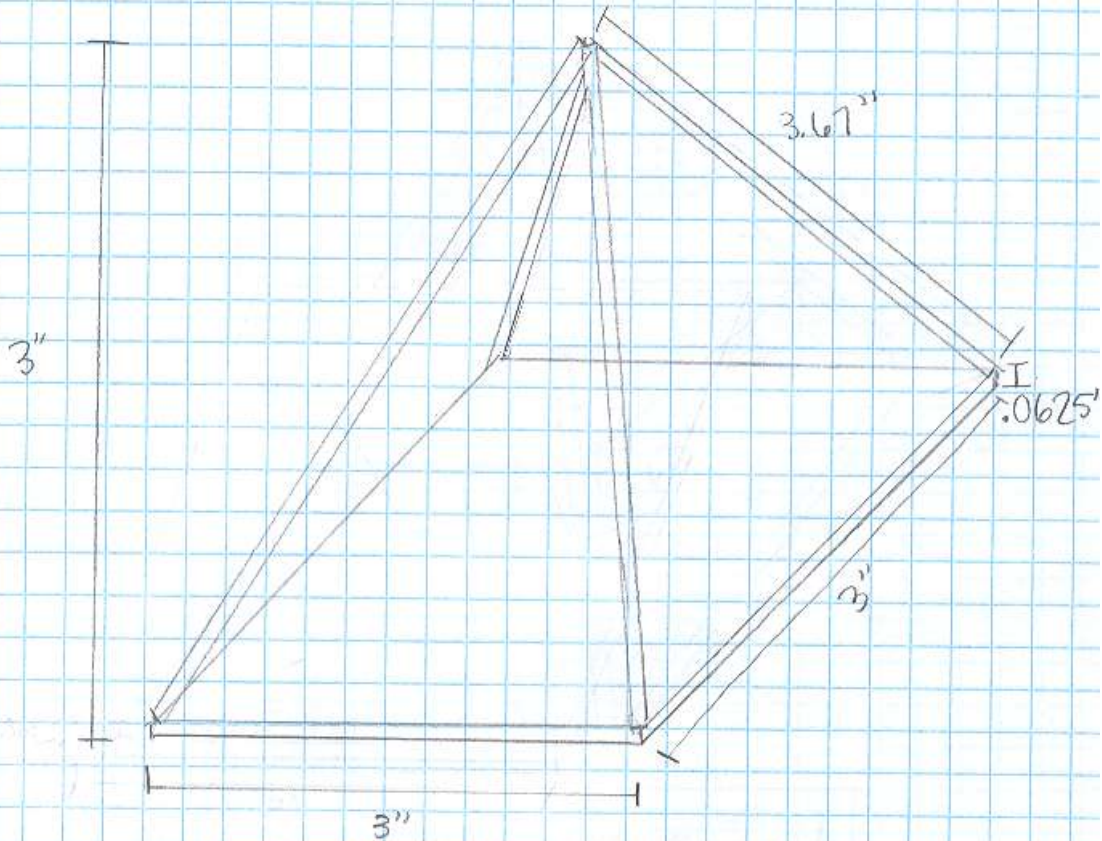
Figure 8

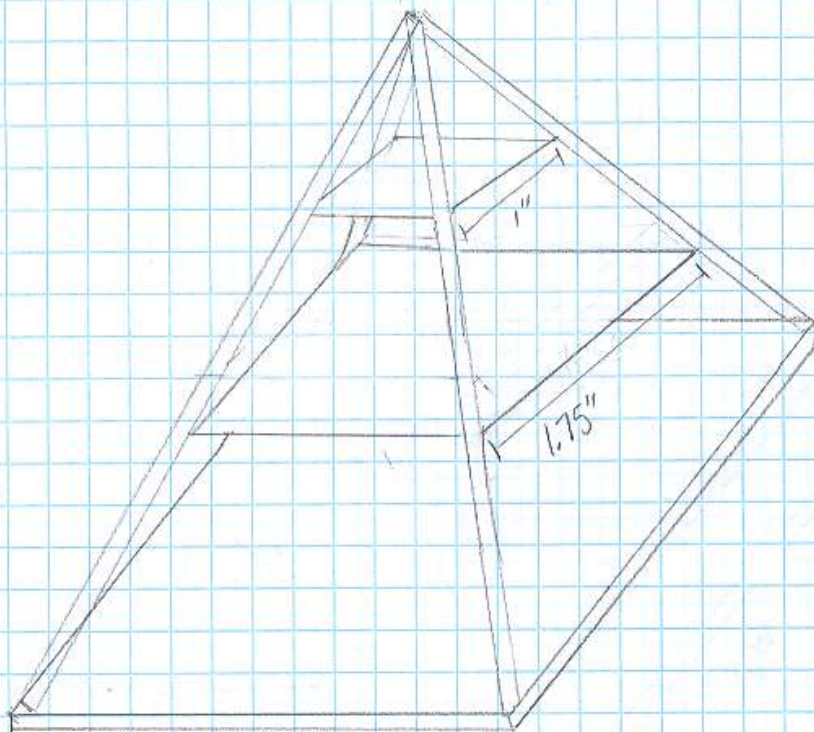


Figure 9



Title: Frame of Pyramid  
Scale: 1:8





Title: The Shelves of the Pyramid  
Scale: 1:8