

# Pavilion on a budget

## Designed by Reyna Caumlo

Supplies needed (They cost under \$100)

- ◆ 1 10' X 10' yard pavilion from Ingles (The grocery store) or Roses. \$20 - \$30
- ◆ 12 twin flat sheets. (Get the walmart specials for about \$3.00 or \$3.50
- ◆ Another twin flat sheet in contrasting color for daps, or 3 yards of 60" wide fabric or 6 yards of 45" fabric.
- ◆ Quality thread in your colors. Don't cut corners here and buy that cheap junk.
- ◆ Marking pencils, in whatever color that will show up on your fabric.
- ◆ Yardstick and a Chalk line
- ◆ 3/4" or 1/2" masking tape
- ◆ 4 packs of twill tape in a color to match the walls
- ◆ Table big enough to work on. Or a hard surface on the floor, don't attempt to cut this on a carpet. (If you have a friend with a ping pong table... now is a good time to pay them a visit)

When using your pavilion, never put it up without the plastic cover! The plastic serves a double purpose, not only does it make the top water proof, it stabilizes the framework of the pavilion. I learned this the hard way.

## Measuring

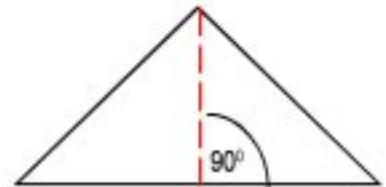
Please don't use my measurements. Not all 10' x 10' pavilions are made the same. It will just take a few minutes to take your own.



(fig 1)



(fig 2)

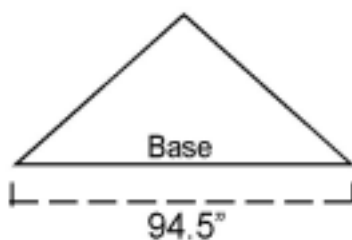


(fig 3)

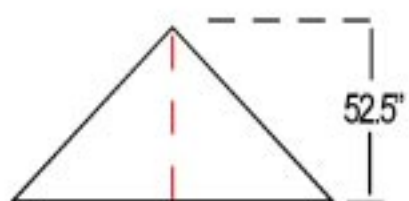
I assembled the top of the pavilion and one of the vertical supports on the each of the corners. (fig 1). This left the pavilion just a few feet off the ground and made it easy for me to measure the top. The top of the pavilion is made up of four equal triangles (fig 2). I don't know complicated geometry, but I know a 90° angle when I see one. If you draw an imaginary line up the center of this triangle, that's what you have. (fig 3)

Make sure that all the poles are firmly pressed together. And measure at least 2 sides to be sure. This is the most important step. If you make a mistake here, the whole thing will be off.

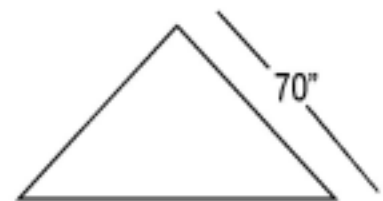
In order to cut the top, all I needed to do was measure half of the triangle and cut my fabric on the fold. The first measurement I took was the width of the base. (fig 4) Then I placed a mark on the center of the base. From that point I measured up to peak of the triangle. (fig 5). That gave me the center height. Then I measured the length of the slope. (fig 6)



(fig 4)



(fig 5)



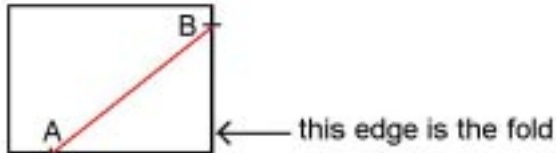
(fig 6)

## Cutting

Once I had my frame measurements I was ready to start the figuring for cutting the sheets. I allow 1.5" for sewing and ease. 1" is for .5" seams and the other half inch is to allow for the plastic cover that goes over the frame.

1. Add 1.5" to the the base measurement . Divide that by by 2, and call it A. ( $94.5 + 1.5 = 96$ )  $96/2 = 48$
2. Center height + 1.5" is measurement B = **54"**
3. Slope length + 1.5" is measurement C = **71.5**

In order to get the 4 top pieces done, I used 4 sheets. I had to take apart the stitching because I needed all the fabric. Sheets are sewed with a chain stitch, so you only have to pull a thread to get all that stitching out. Once the fabric is ready, I folded all four sheets in half and laid them on top of each other keeping them even (fig 7). I used the tabel to line everything up with the fold and get it square.

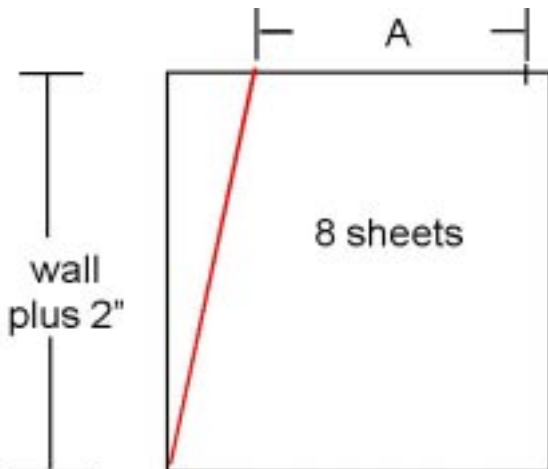
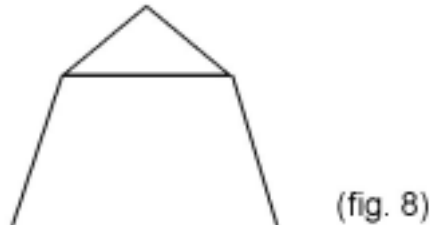


1. Measure from the bottom edge at the fold and to the left, place a mark at 48" and call it point A.
2. Measure from the bottom edge at the fold and up. Place a mark at 54" and call it point B
3. Snap a line from point A to point B. Just to check, measure the line you just made, if you did everything right it should be about the same as measurement C.
4. I cut on the line I just made. Before I start sewing I tape the edges I just cut with masking tape. Since it is a very light fabric and on the bias it will stretch like crazy if you don't tape it.

## Walls

I put the rest of the pavilion together and measured for the height. I added 2" to that measurement to allow for seams and to have it hang to the ground. Leaving the sheets as is; I laid out the remaining eight . Four up and four down, all on top of each other. I will be using the hem that is already in them for the bottom and the edges where they open at.

If you look at the walls of the pavilion while it's up, you will notice that they flare out. (fig. 8) You will need to need to allow for this when you cut.



1. I placed a mark 2" from edge. ( this is where the top of the wall sews to the center of the pavilion top, the 2" will form a 4" overlap
2. From the 2" mark over, I made a mark the distance of A.
3. Snap a line from this point to the bottom left of the sheets. This gave me the angle needed for the flare of the walls.
4. I cut on the red line.

# Dags

The ones I did here are plain and simple. They also give you the option to paint a nice border on them when you are done. Cut four pieces of fabric the length of the base +2" X 15". Fold them in half the long way. Tuck in 1" on each side. The raw edges will get sewed to the pavilion and they won't have to be hemmed.

If you want to get fancy and do triangles, you can use 2 layers of fabric and sew, turn and press. On these pavilions, the dags also serve the purpose of covering up the plastic that is along the top, so you should still have a straight border of a few inches at the top of what ever you do. The dags you use are a personal preference depending on how much work you are willing to put into them. To come up with how many and what size, divide the base measurement ( $A = 96$ ) by ten. You can do 10 dags that finish at 9.6" wide. (fig 10)

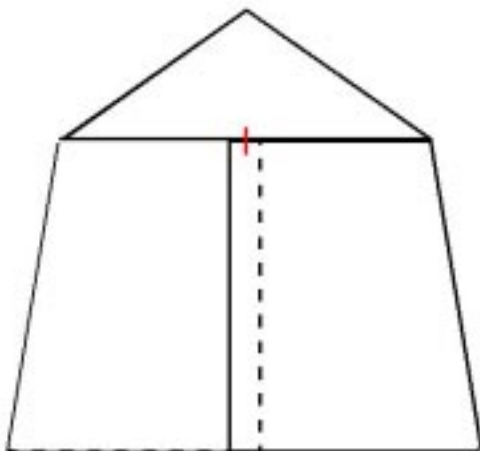


## Sewing



1. Put a notch in the center of the bottom of each roof triangle
2. Starting a half inch in from the sides, sew dags to each top triangle. This will keep them open on the corners so they don't pull where the walls flare out.

3. I flipped the dags up out of the way to sew the walls on next. It is easier to work with each side separately, then sew the four pieces together after each top triangle section has dags and walls sewed to it.



4. I lined up the notch made at the top of the wall with the center of the roof triangle. I sewed one wall on, then did the same for the other wall overlapping it.

5. When I finished sewing each wall, I then sewed them together, starting at the top and lining up my corners. I used twill tape as a reinforcement when I sewed the walls to each other on the side. When I got to the bottom, I made a loop in the seam tape to be used for staking the corners down.

When done with your pavilion, I suggest that you make a bag with 3 sections in it to separate the framework when you store it. It's makes putting it together very easy. If you have 3 people helping you, it goes up in about 10 minutes. 15 - 20 minutes for 2 people.