Pickle Project: Backpacks and Tote Bags

Design, Recipe, and Tutorial

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A “recipe” instead of a pattern

For this year’s Pickle Project, I thought I’d try something a little different. So far, they’ve all been items small enough that the pattern pieces can all fit on letter-sized paper for easy printing. But this year, I wanted to do a pattern for a larger item, so I thought I’d try a different approach. So instead of pattern pieces you can print out, this is a formula you can use to make a backpack or tote bag in whatever size you like. All of the pieces are rectangles; so this “pattern” will show you how to mark and cut the pieces in whatever dimensions you need.

Like previous Pickle Projects, you can make these items using a home sewing machine (or even sewing by hand, if you are patient) and using either reclaimed/recycled materials, or new materials that are easy to purchase.

The basic backpack is a simple, practical design with a main compartment covered by a long lid flap, with two shoulder straps and a handle. Any other details are up to you, such as pockets, drawcord, padded back, etc. There are some descriptions given for possible ways to do some of those things.

The tote bag is even simpler. It has essentially the same construction as the backpack, but without the lid and with two handles. Although of course, you could add bells and whistles to a tote bag, too.

Here are two tote bags and a backpack, made from a banner from a previous year’s edition of West Medford Open Studios:

In the photo below, you can see the original banner. I cut the pieces in such a way as to position interesting things on all the bags. The other side of the larger tote bag has the word “West” across it; when the backpack

lid is open, it says “wmos” down the front. You can see where the blue morning glory and the painting come from on the original banner.

Materials:

This will show you how to make a backpack or tote bag in whatever size you need. Lots of materials can be suitable: Canvas, denim, or upholstery fabric; vinyl banners or tarps; tweed, twill, cotton, wool, polyester, nylon, old dropcloths, jeans, jackets, bags, curtains, etc, could all make cool bags. Just keep in mind that the material you choose should be appropriate for the size and intended use of the finished bag. In other words, if you’re making a gigantic huge backpack, you should make it out of a fabric that can handle the weight when it’s full. If you want to take it out in the rain, you probably want a fabric that has some water resistance.

You can also add a second layer to supplement what you choose. For example, you could use a vinyl tarp liner with a wool tweed outside for a bag that looks classic but keeps the rain out. Or you could use two layers of cotton canvas with a layer of Tyvek sandwiched in between for a bag that feels like cotton but has the reinforcement and waterproofness of the Tyvek. Or you could make a drab canvas outside with a psychedelic tie-dye lining.

This backpack is made from a huge red banner that said “Saucony” on it in white. The lid has a chunk of the Saucony logo on it. The back of the banner was unprinted white, and that’s where all the white trim came from.

Here's one I made from new materials for my preschool-age nephew. It's a lot smaller, and I went a little nuts decorating it.

Other materials and hardware you might need include buckles and hardware, webbing, velcro, zippers, etc. There are tons of options! You can also get creative with re-used and re-purposed parts. Old belts, handbags, coats, keychains, pet or equine items, etc, can all be sources of buckles.

Of course, you can also just buy new materials. If you can't find what you want locally, at the end of this document is a list of places I recommend where you can order all sorts of fabrics and hardware suitable for outdoor gear.

Procedure:

If all of this looks obvious to you, you can skip to the **"Quick and Dirty" instructions** on Page 6.

Let's start by looking at the structure of these bags:

The Tote Bag has two rectangles that form the sides, and determine the bag's height and depth. One larger rectangle wraps around three sides of the two side panels, forming the front, bottom, and back of the bag. Add handles, and you have a tote bag.

The Backpack has essentially the same structure as the Tote Bag, except that the large piece extends past the top of the side panels, and up and over to form the lid and overhang. Add buckles and backpack straps and you have a backpack.

So, all you really need to know is how big you want your rectangles to be. The one thing to keep in mind is that the final size of the bag will be measured from the **stitching line**, not from the edge of the material, because you need seam allowance in order to sew the pieces together.

Different types of seam finishes and different fabrics will require different amounts of extra. In the finished item, you can choose to have the seam allowances either on the outside or on the inside. This doesn't make any difference to how big you cut the pieces, but it does make a big difference in the look and feel of the finished item, and can affect the behavior of the fabric, such as whether the side pieces want to bow out or bow in. Needless to say, if they're on the outside you probably want to make sure they look nice!

Seam allowances outside vs. inside:

Also, the width of the seam allowance needs to work for the material you're using. If you're making a large bag in a woven fabric, you probably want a larger seam allowance to keep it from fraying with use. If you're making a smaller bag out of vinyl, you can use a narrower one. It's easier to sew accurately with a narrow seam allowance, but there's more room for error in a larger one.

You can make the finished bag with the seam allowances either on the outside, or the inside. The rest of this tutorial will assume you're going to bind the edges either way. For more information on how to do this, or for other seam finishes you can choose from, see the "Basic Techniques" section at the end of this document.

Finishing plain edges:

Around the openings of both the backpack and the tote bag, and the edges of the backpack's lid, are edges that aren't seamed to other pieces. You can use similar methods to finish them: either hem them (fold over the edge once or twice, then sew it down) or bind them. Whichever method, you'll need to **decide BEFORE you cut pieces out**; binding a plain edge does not require additional seam allowance to be added to the finished dimension, but hemming does.

Cutting and marking:

As I mentioned, these bags are made entirely of rectangles. You don't even need to make templates out of paper before you cut your fabric, as long as you have a reliable way of cutting rectangles with square corners and straight lines.

Mark everything as you go. For marking the edges of the fabric, the easiest and most precise way is to make notches - a little snip into the seam allowance, big enough that you'll be able to find it but small enough that it won't show in the finished item.

For marking things in the middle of a panel, such as the placement of straps, chalk works well and comes off easily later. You can also use pen or pencil or marker, if you mark in such a way that the stuff you sew on will cover up the marks.

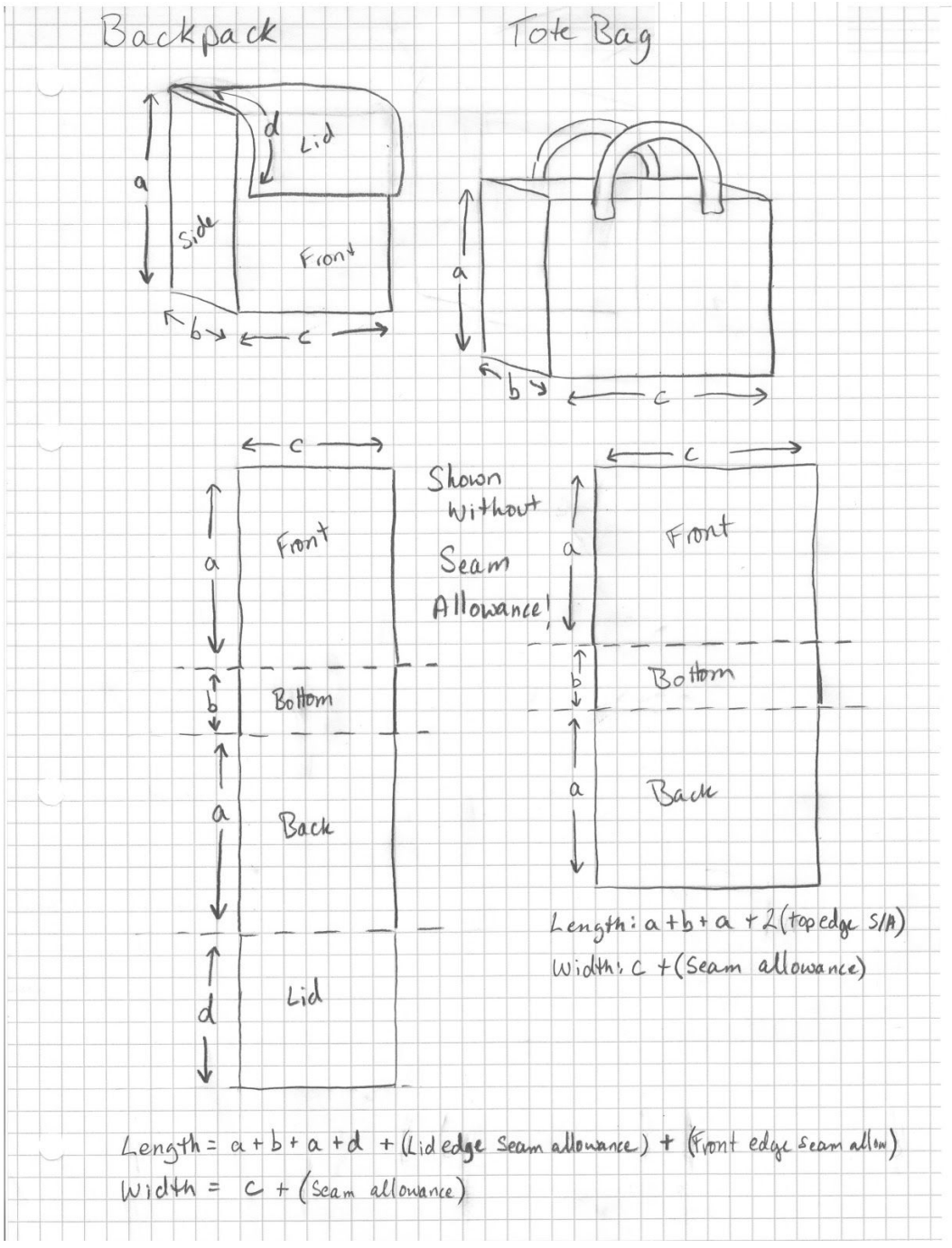
The Quick and Dirty Instructions:

Step 1:

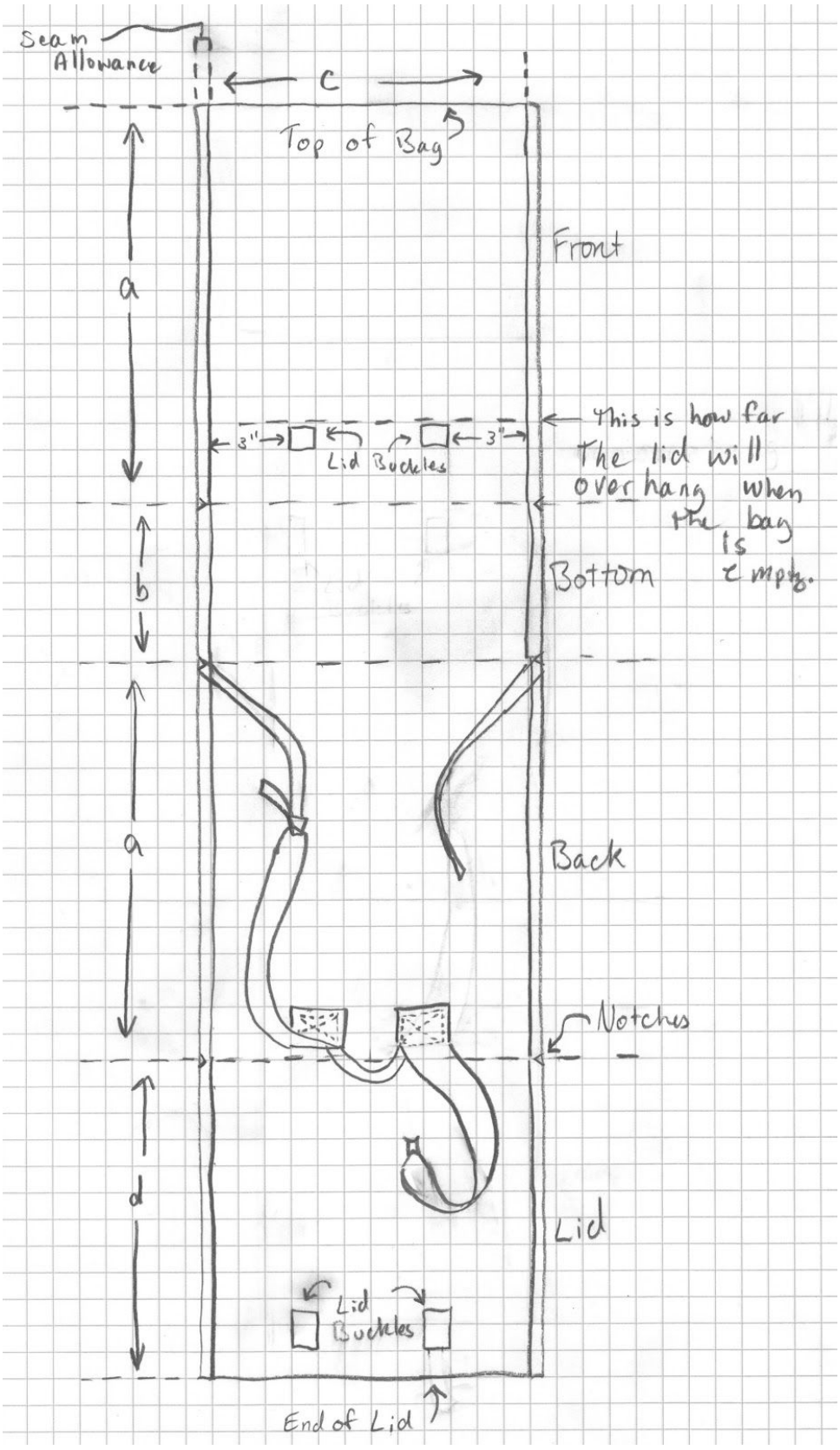
Decide what you'll use for seam finishes, and what stuff you need to sew on, such as pockets, extra straps, etc.

Step 2:

Using the formula in the diagrams, calculate what sizes the pieces need to be. The main body of the bags are made of three rectangles; anything else is optional. Cut out all the pieces, and prepare whatever straps and pockets and handles you need. The diagram on this page shows finished dimensions, but doesn't include seam allowance. The one on the next page is drawn to scale, and does include seam allowance.



(This diagram is to scale and includes seam allowance. There's a formula in the Verbose and Detailed instructions below if you need it)



Step 3:

Mark all your pieces with where you'll need to attach straps, pockets, handles, bells, and whistles.

Step 4:

Sew down all pockets, straps, etc. Also bind, hem, or otherwise finish any edges that need it before being assembled.

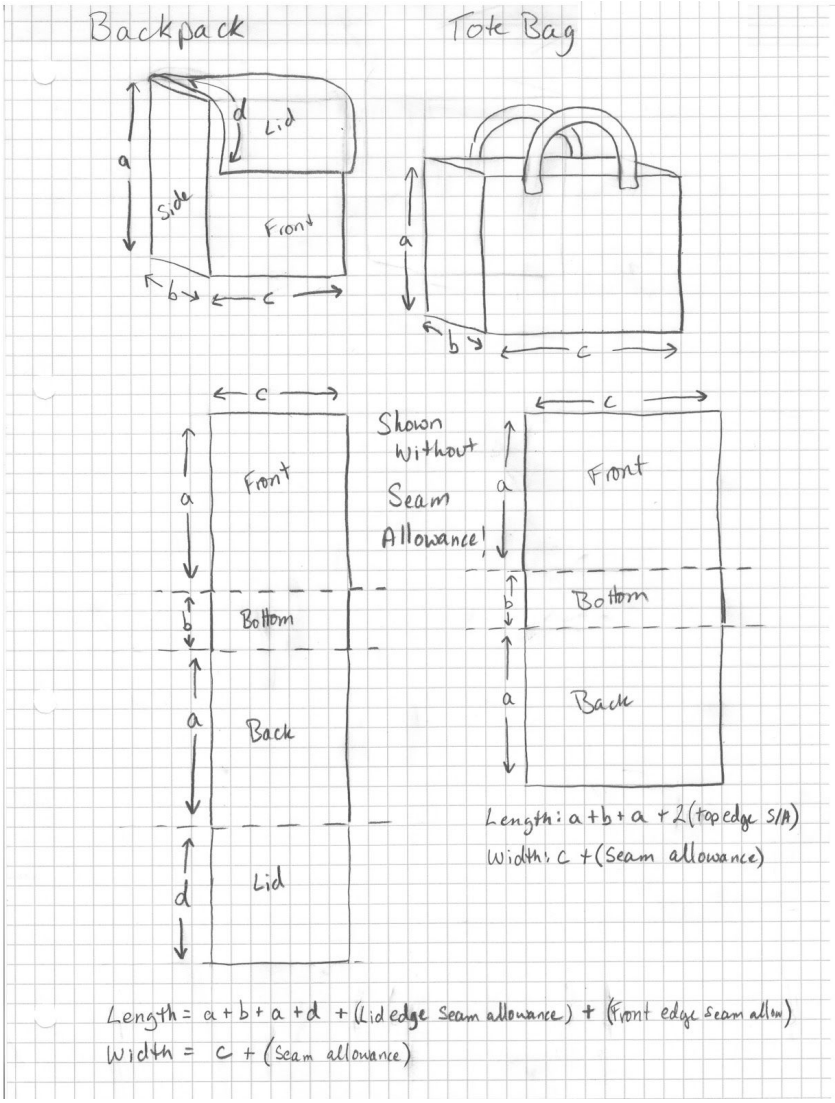
Step 5:

Assemble the bag, and finish the seams.

The Verbose and Detailed instructions:

Step 1:

Decide what finishes you'll use for all the edges and seam allowances. Remember that **seam allowances might not be the same on all sides of a cut piece**, depending on which finishes you choose. Also decide what methods you'll use to close the top of the bag, if any: compression straps, drawcord, additional "skirt" with a drawcord, etc. Some of these things can be done after the fact if necessary if you forget or change your mind, but it's much easier to think about them in advance!



Step 2:

Figure out what sizes of rectangles you need, then cut and mark them appropriately.

This diagram shows what numbers you need. Note that so far it only shows finished dimensions, and doesn't have seam allowances, so **don't cut this out quite yet**!!

As an example, let's say we're going to make a backpack that is 15" tall, 12" wide, and 6" deep.

How do we know how long to make the lid? A good rule of thumb is that the lid shouldn't be longer than the overall height of the bag, or it will overhang too far; but it needs to be long enough to reach over the entire depth, and also overhang the front by at least a few inches if the bag is very full. So in our case, that means somewhere in between 9" (which is the 6" depth, plus 3" of overhang) and 15" (which is the overall height). So let's split the difference and make it 12". That will leave plenty of overhang, but also plenty of room for straps and buckles on the front of the bag.

Let's assume ½" seam allowances, and bind all the edges and seam allowances. That means we need to add ½" at every edge that will be sewn to another piece, but we don't add anything to edges that aren't sewn to anything else, such as the top edges of the bag opening and the end of the lid. For what it's worth, I think ½" is a good seam allowance size for most of the materials you might use for these. Some will work with a narrower seam allowance than that, and some won't. Wider than that looks a little silly, especially in a small bag.

The front, bottom, back, and lid are all one piece (if you're making a tote bag, you can ignore the lid). If your material isn't big enough to cut it all at once, you can sew it together in pieces before you even measure out your rectangle. So let's just assume the material is long enough.

This is the rectangle you need to cut out for the front/bottom/back/lid:

Where **a** is the height of the backpack (the front and back are the same height!), **b** is the depth, **c** is the width, and **d** is the length of the lid:

Length = (front edge seam allowance) + a + b + a + d + (lid edge seam allowance)

= (0) + 15 + 6 + 15 + 12 + (0) = 48"

Width = (seam allowance for side seams) + c + (seam allowance for side seams)

= (0.5) + 12 + (0.5) = 13"

So in our example, the front/bottom/back/lid piece should be cut at 48" long by 13" wide. After cutting, mark where the corners are with a notch (e.g, a little snip into the seam allowance) in the position of each dotted line that demarcates the sections in the diagram.

The **side panels** are much simpler. **Cut them as follows:**

Height = (top edge seam allowance) + a + (seam allowance for bottom seam)

= (0) + 15 + (0.5) = 15.5"

Width = (side seam allowance) + b + (side seam allowance)

= (0.5) + 6 + (0.5) = 7"

So the side panels need to be cut to 15.5" by 7".

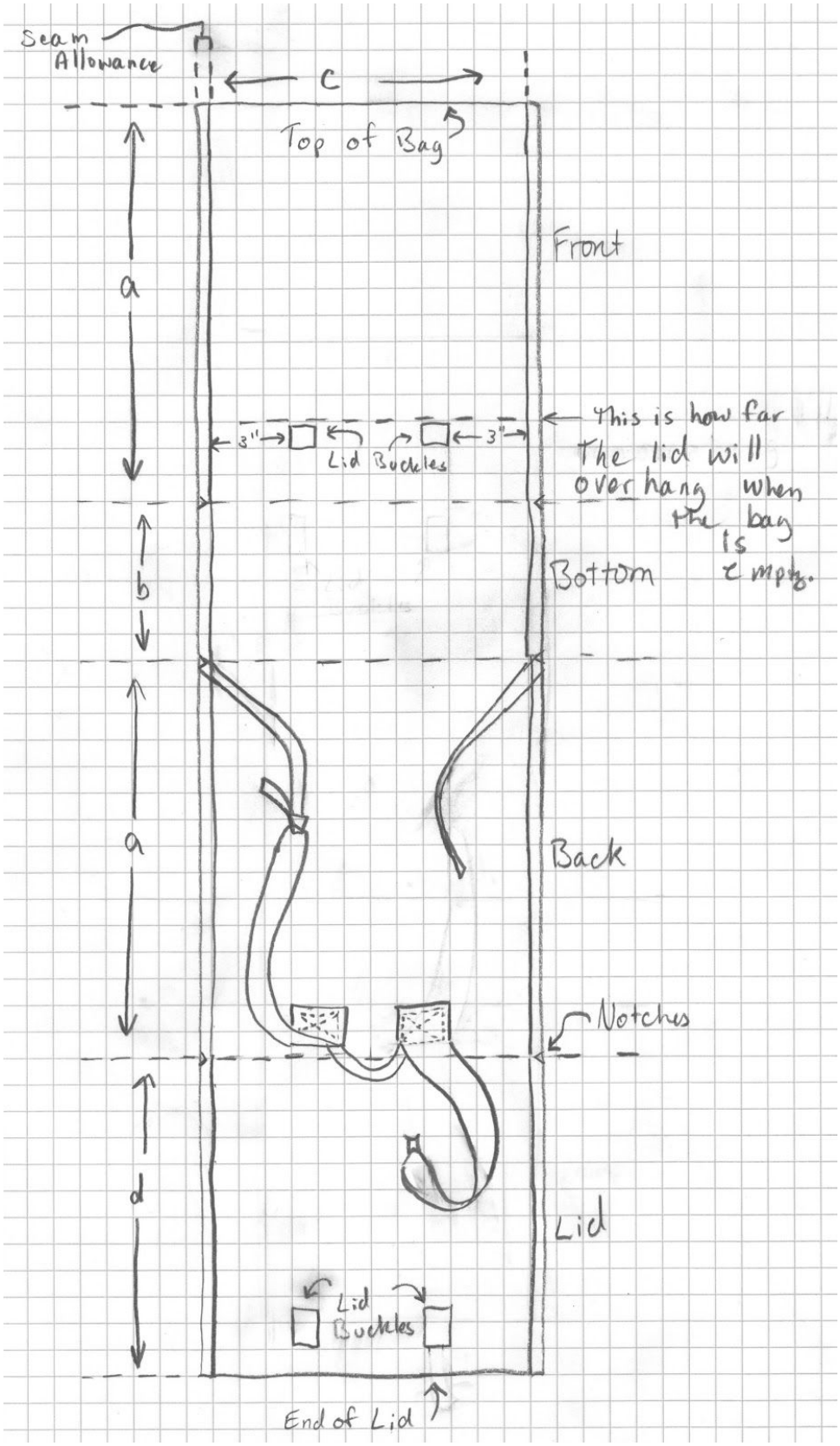
Step 3:

Make any straps, handles, pockets, decorations, or any other extras, and mark their positions on the main panels.

A tote bag just needs handles. A backpack needs, at the minimum, backpack straps and buckles to keep it closed. Most backpacks have adjustable straps, which is often accomplished by having a wide strap of maybe 14-19" (for an adult backpack) over the shoulders for comfort that is attached to a narrower one with an adjustable buckle. The buckle is then attached to the bottom corner of the back panel.

There are lots of ways you can make or buy straps. One simple way is to use plain webbing, in whatever width you need. You can always use wider webbing and sew it down to narrower webbing.
But you can also make your own straps or handles out of whatever materials are handy. They need to be

reasonably sturdy and need to hold their shape, but those are really the only real requirements. The same is true for buckles and closures. You really just need a way to keep the lid closed that's adjustable according to how full the bag is. The world is full of interesting buckles, closures, straps, toggles, buttons, hooks, D-rings, velcro, magnets, etc. There are a few examples of how to make straps in the "Basic Techniques" section, too.



Here is a diagram of the backpack front/bottom/back/lid panel indicating where important buckles will go. It's drawn to scale, including seam allowances. 1 square = 1 inch.

Lid buckles: You can use one buckle or two, or velcro or whatever else. But the important thing is that you measure so that whatever you use is centered and at the same spacing on the Front as on the Lid. Their position up and down is determined by the length of the lid. The buckles should be positioned so they're below where the lid would hang to if the bag were totally flat; the straps should probably be long enough to accommodate a bit of over-stuffing. So in our example, that means the buckles should be attached no more than 3" above the bottom corner, and the straps should reach at least up to 3" below the top edge. They should be positioned at equal spacing on the lid, but pointed in the opposite direction so that they'll meet when the lid wraps around.

Backpack straps: You'll notice that in this diagram, the Back panel is actually upside down. I've drawn the backpack straps so that both are 2" wide. One is buckled to the strap at the bottom corner; the other is un-buckled so you can see how it lies against the lid and how it is sewn down. I've also drawn a handle. This should be sewn down first, BEHIND the backpack straps.

The bottoms of the backpack straps should be sewn into the seam allowances at the back bottom corner. They should be sewn at an angle, roughly 45° give or take, or order to point the right way when the backpack is worn.

Step 4:

Sew down straps, extras, pockets, decorations, everything that isn't the final assembly. It's much easier to do this now, while the pieces are flat!

Also, hem or bind the edges that don't need to get sewn to other edges. This means the top edges of the front and sides (and back, if it's a tote bag), and the bottom edge of the lid. Leave the sides of the lid alone for now; you can finish them when you finish off the other edges.

Some tips:

- Some types of straps should be sewn into the seam allowances. These include the bottom ends of the backpack straps, as well as compression straps, etc. I recommend sewing back and forth over these a whole bunch of times in the seam allowance, or just up to the stitching line, but not past. That will reinforce them so they don't pull out of the seams.
- Other kinds of straps need to be sewn right onto the face of the panels, such as the tops of the shoulder straps and the main closure buckles. There are a number of ways you can do this, depending on how much stress you expect that strap to get. One way is just to sew back and forth over the same spot. There are others in the "Basic Techniques" section at the end.
- If your straps are nylon webbing or something similar, you can singe the ends with a lighter to keep them from unraveling. Otherwise, you can hem the ends or in some cases even just cut them at an angle.

Here's what that big long panel looks like at the end of this step:

Fun fact: Those gray buckles came from the same pink backpack that got turned into a seat pack a couple of tutorials ago.

Step 5:

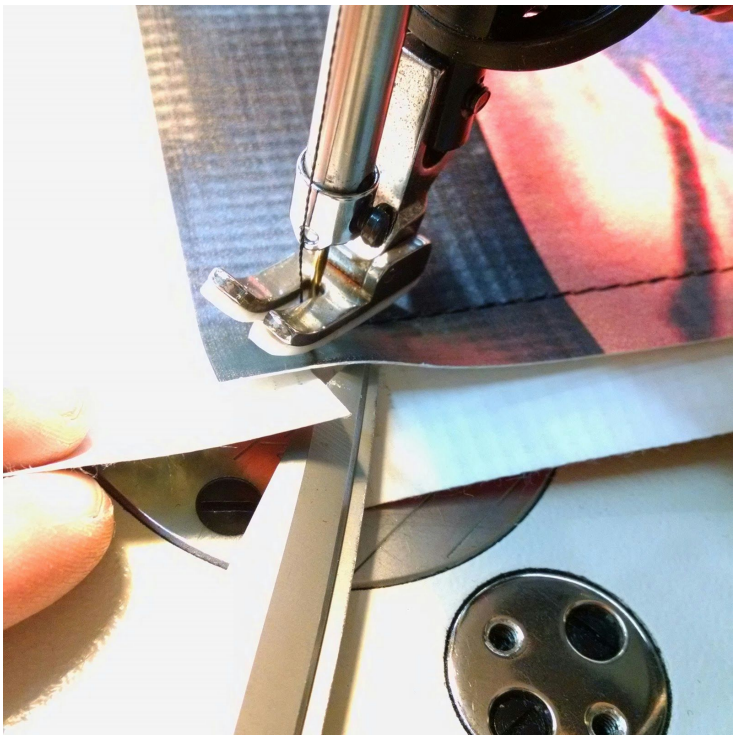
Here's the moment we've all been waiting for! Sew it all together! Just keep in mind that if you want the seam allowances to be on the outside of the finished bag, which means you see the binding as "trim", you need to sew the pieces together with the insides together, so it's right-side-out. If you want a "clean finish" look,

with the seam allowances hidden on the inside, you need to sew the pieces together with the outsides together, so it's inside out.

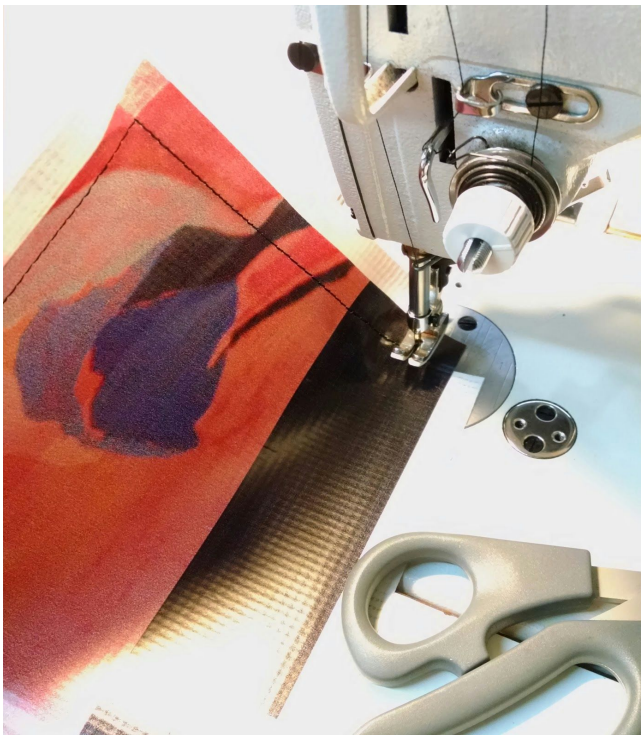
To sew these bags together, you really only need to be able to sew in a straight line. Your sewing machine should have markings to the right of the needle at different widths; the edge of the fabric should line up with the appropriate one of those. If you don't have the mark you need, you can stick a piece of masking tape on the bed of the machine and draw it on.

I recommend sewing with the front/bottom/back/lid panel on the bottom, and the side panels on top. Start at the top front corner and backtack (sew back and forth) over the end once or twice, then sew in a straight line until you get to one-seam-allowance-width of the bottom edge of the side panel. This should be the same place as the notch demarcating the front from the bottom. With the needle down in the fabric, pivot the side panel around the needle until its bottom edge lines up with the side of the front/bottom/side/lid panel again. What you've already sewn will come along. If the fabric is very stiff or things start to bunch, you can snip your notch almost as far as to where the needle is to facilitate this maneuver. Just don't snip too far!

Snipping the seam allowance at the pivot point:



Pivoting around the needle:



In the photo, the two seam allowances aren't the same size. Don't worry about it; if you're curious, you can read about different seam finishes in the "Basic Techniques" section.

Continue until you get to the top of the side panel again, and backtack a few times. As a reminder, this should line up with your notch here, too (or the top edge, if it's a tote bag). The beauty of the backpack design is that if it doesn't line up exactly here, it's really not a big deal. It'll just make the lid get a tiny bit shorter or longer, by a negligible amount.

BUT you'll have to account for that when you start the second side, or the bag will end up skewed. So turn the bag around and start on the second side, from the other direction. To keep things symmetrical, position the second side panel exactly how the first one ended up, even if it isn't exactly where it should have been. Hopefully, whatever imprecision caused it to drift will work the same way again, and the ends will mean up when you get back to the front.

If your pieces don't line up the way they should, even though you measured them very carefully, here are some possible causes, and what to do about them:

- You went either a little bit too far or not far enough before pivoting around the needle. If you don't feel like ripping out the stitching and doing it over again, try to duplicate what you did on the second side. An easy way to avoid doing this is to use the handwheel for the last few stitches before the corner, and measure how far you are from the edge before pivoting.
- The material didn't feed evenly. This can be because the surfaces facing each other are slippery, because the surface facing the bottom of the sewing machine foot was sticky, because ungainly bulky pieces were getting hung up on something, or because the materials are just a little bit on the heavy side for the machine. If sticky fabric is the problen, an easy way to solve this is to put a piece of paper (pretty much any paper will do) on top of what you're sewing, and sew through that too. You can just tear it off when you're done.
- Something got bunched up as you were sewing it. This is most likely to happen at corners, but it can happen anywhere especially if the project is large and tricky to wrangle under the machine. Keep an eye on things when you turn the corner, snip the seam allowance if you need to, and keep the pieces as flat as possible.

Step 6:

Now it's looking like a bag! The only thing left is binding and finishing. There are several methods listed above. To stop and start the binding, you can cut it off right at the end and leave it if it's a material that won't fray (vinyl, Tyvek, repurposed inner tubes, etc). If it's a synthetic material like vinyl or polyester grosgrain ribbon or webbing, you can singe the ends with a lighter to keep them from fraying. Or, you can continue the binding past the end of the edge, and then fold it back on itself and sew it down.

Sewing the binding on can get awkward around the corners. It will help if you clip off the corners of the side panels to cut down on the excess bulk. If the material is really uncooperatively stiff (a vinyl banner, for example) you can just snip off the corners entirely and bind the edges in sections. Vinyl like that won't fray in any case.

Another way to deal with ugly corners is to ignore them on the first go-round, then come back and bind them over again with a larger piece that can cover up all the ugly. If you do it on all four corners, it will just look like neatly reinforced corners. Or, if you're worried about ugly corners, just put the seam allowances on the inside and no one will see them. If they're inside, that's even more reason to clip them so that they don't make too much trouble in there.

And you're done! Go put some stuff in your new creation and carry it around!

P.S: About pockets, linings, padding, decoration, etc.

Pockets: You can add all sorts of pockets to your bag. The Dill Pickle Wallet pattern and Wedge-Style Seat Pack pattern will give you some instructions for how to deal with zippers and buckles for additional pockets. All of these things should be done before you assemble the bag. Here are a couple of examples of pockets:

This is the side pocket of the red backpack. It's just a rectangle a bit wider than the side panel (to make it roomier), but not as tall. I hemmed the top to the outside to show the white and make it match the contrast binding, then sewed it down to the side panel. Imade a couple of pleats in the bottom to make the sides match up. I didn't even measure these, I just eyeballed them.

Below is the zippered lid pocket on the WMOS backpack. I cut a window in the lid panel and sewed a zipper into it, then sewed another piece of the banner onto the lid behind it. I'd have preferred to use a piece that reached all the way to the sides of the lid, but I didn't have a piece that big left after cutting out all three bags.

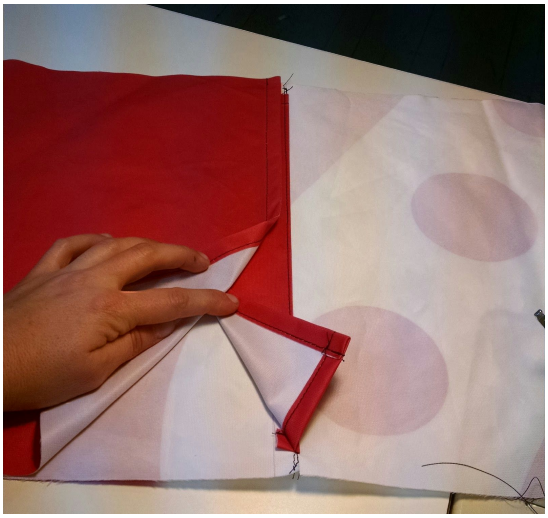
Linings: It's very easy to add a lining to your bag. Just cut out exactly the same pieces in the lining as in the outside. If you sew all the straps and stuff onto just the outside material, then put the lining and the outside pieces together (wrong sides together) and treat them as one when you assemble the whole bag. That way the stitching for the straps won't show on the inside. Alternatively, you can put the lining and the outside together first, and sew the straps on afterward. That will let the lining act as an additional stabilizer to strengthen the strap attachments, but you'll see the stitching inside the bag.

Padding: Many backpacks have a padded back. As with everything else, there are a couple ways of doing this. The simplest is to put the lining and the outside together, then sew a line of stitching across the bottom of the back (the line between the back and bottom). Leave finishing the end of the lid to last. Assemble the bag as usual.

Then cut a piece of foam that's at least ¼" smaller than the back panel not including seam allowance, and slip it in through the opening at the end of the lid. You might need some trial and error to figure out how big the foam should be, depending on how thick it is. Stitch across the junction of the back and the lid to keep the foam in place. Then finish the raw edge of the lid. The potential difficulty with this method is that it can be awkward to get the lid back under the machine with the foam in there, straps sewn on, etc, etc.

Another way to add padding for the back is to make a flat pocket in the back of the bag, with a velcro or other flat, unobtrusive closure. Then you can finish the bag and slip the foam piece at the end. This way takes more steps, but you don't have to worry about anything getting awkward to maneuver under the machine. Another advantage is that you can remove/replace the foam if desired, or use that pocket for something else later.

Pieces of slot sewn onto back:



Foam being inserted:

Flap closed over foam:

For padding, I recommend closed-cell foam such as polyethylene. You can order it online, or you can scavenge old yoga/workout mats, camping pads, packaging, etc. See the sourcing list.

Decoration: This should probably have been at the top of the list, since you probably want to do this first before anything else. A few possibilities are piecing together a bunch of different colors or fabrics; sewing stripes or shapes on top; painting; sewing on reflective tape, patches, ribbons, etc. I'm partial to reflective tape, myself, but the sky's the limit!

Closure: For bags like this, I'm partial to drawcords. They're quick and secure, long-lasting, easily repaired/replaced, etc. And the way you insert them can help encourage the top edges of the bag to fold in under the lid, instead of sticking out. All you need are a few grommets, a cordlock, and a cord. You can buy grommet or eyelet kits at most hardware stores, fabric stores, and craft stores.

Sourcing:

Outdoor fabrics and hardware for hobbyists:

Seattle Fabrics www.seattlefabrics.com

Outdoor Wilderness Fabrics www.owfinc.com

Rockywoods www.rockywoods.com

My Tarp (vinyl coated polyester tarp material, etc) www.mytarp.com

Buckles and other hardware:

Buckle Guy www.buckleguy.com

Creative Design Works www.cdwplus.com

Hudson Supplies www.hudson4supplies.com

Reflective tape and other conspicuity products:

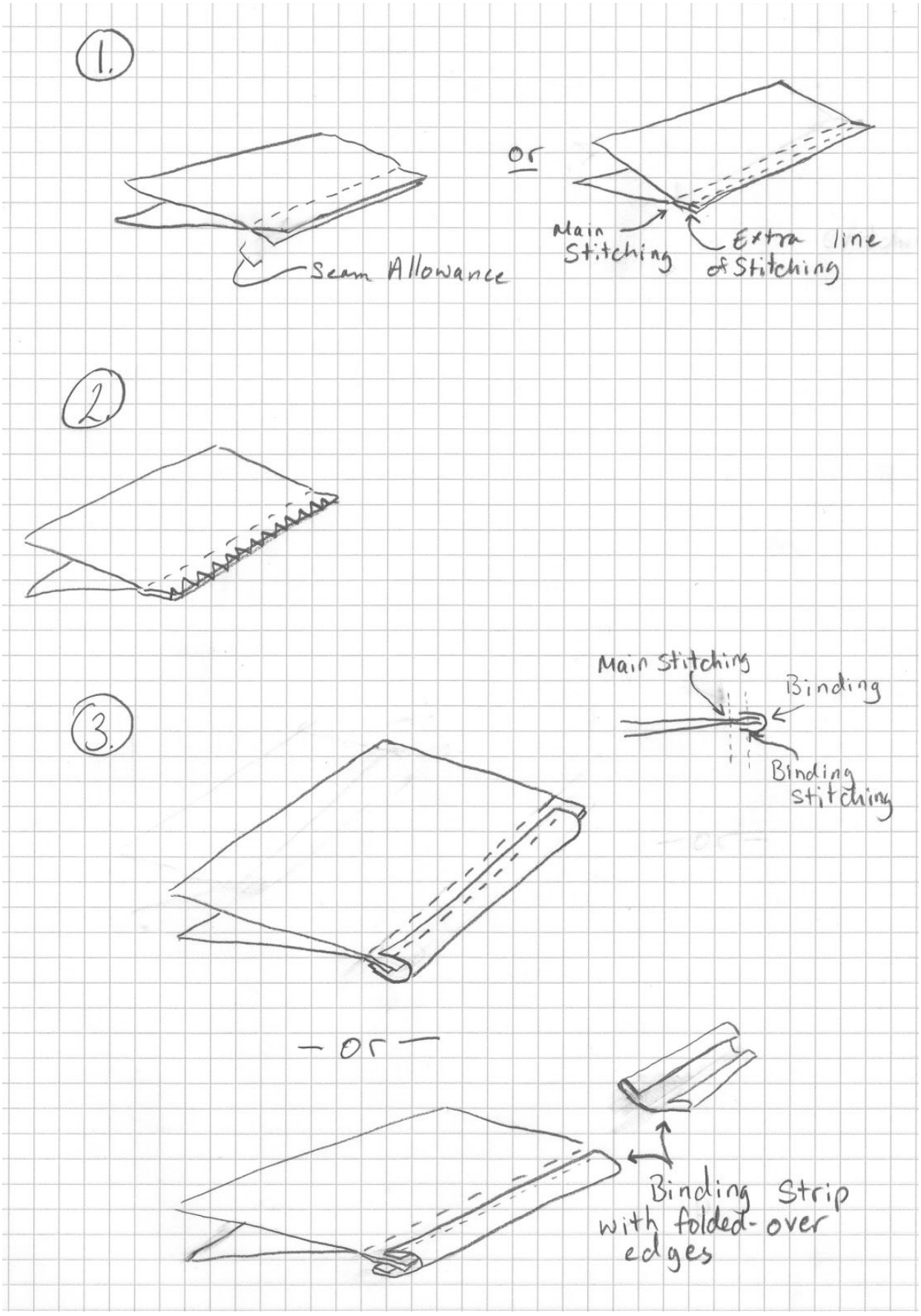
Identi-Tape www.identi-tape.com

Foam (some of the above places have foam, too)

Foam Factory www.foambymail.com

Basic Techniques:

Seam finishing methods:

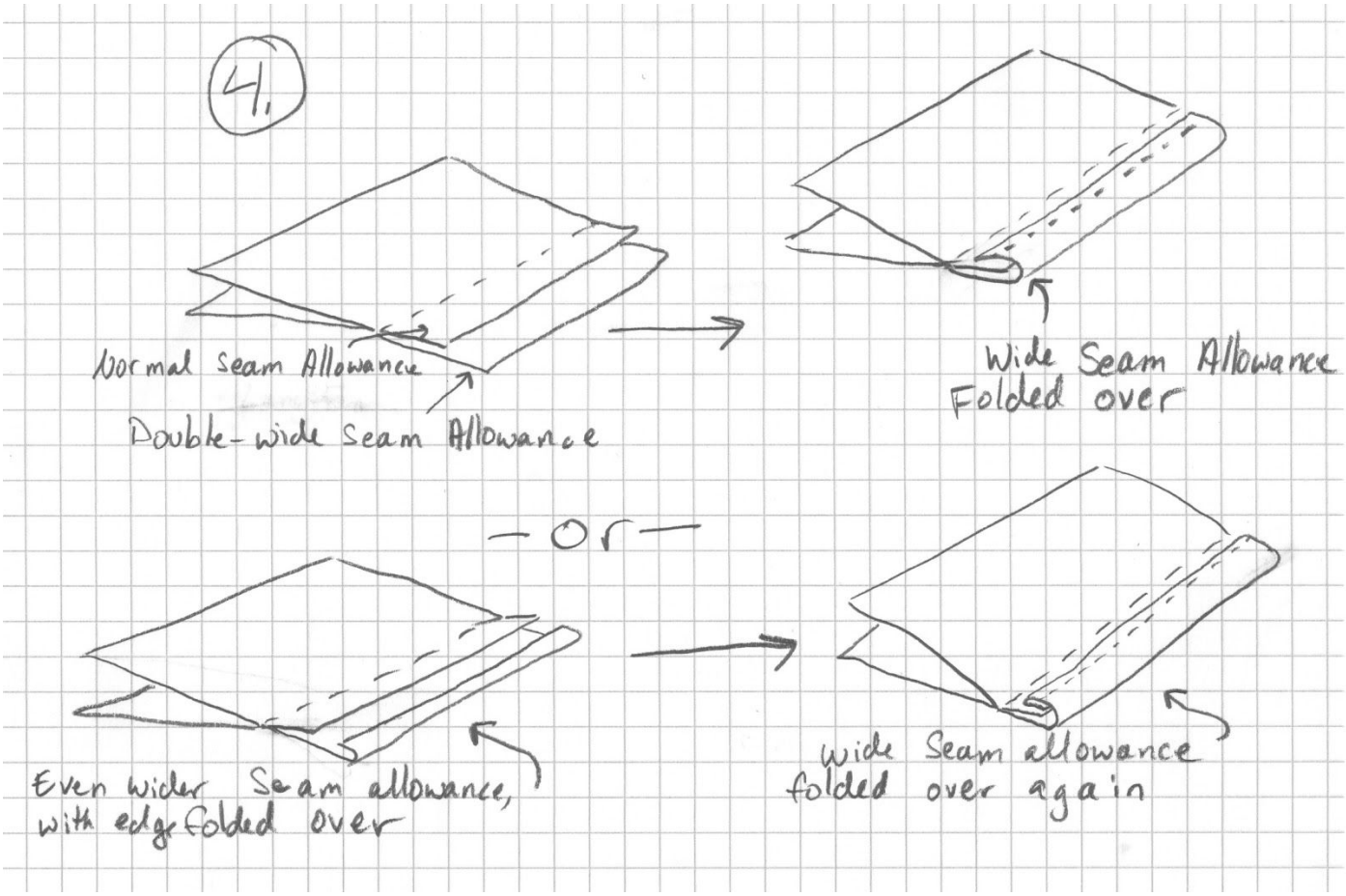


1. None at all! If you're using a material that won't fray, you can just leave your seam allowances as they are. Or put one line of stitching through it to keep the edges together. Advantages: It's quick and easy! Disadvantages: It looks more unfinished, and won't protect the edges of the fabric.

2. Overlocking or zig-zagging. If you have an overlock/serger machine, you can overlock the raw edges. Or run a zig-zag stitch over them with a regular sewing machine. In fact, you can even do this before you sew the pieces together, which will prevent them from fraying while you're working with them. Advantages: Also quick and easy, and looks more finished than not doing anything. Disadvantages: It can still look sort of sloppy or home made, and it may not be sufficient protection for a heavier-duty bag. Plus stuff can get caught in the threads.

3. Binding. Binding means that you fold a strip of material over the seam allowance and sew it in place. There are lots of things you can use for this purpose: bias tape, ribbon, webbing, strips of fabric (fold the edges in first to keep them from fraying!), or used bicycle inner tubes (see the Wedge Seat Pack instructions for how to do this if you need some advice). Advantages: Depending on the material you choose, binding can give the corners extra stiffness and structure. It gives the finished item a more polished and professional look, plus it's effectively an additional row of stitching, so it reinforces the bag as well. Disadvantages: It's another step, and you have to either track down or create a material to use for the binding. It can take a little practice or patience to do a nice job.

4. Self-binding.



For self-binding, you cut the pieces so that the seam allowance on one piece is bigger than on the others. Then go back and fold it over and sew it down. Advantages: Has the same clean finish as binding seams, and makes a seamless edge with main panels. Sewing down the folded-over edge is a

little easier than sewing on binding, and it's a little less bulky. Disadvantages: You have to plan on it from the beginning, and it can be more awkward to sew the initial seam because you have to worry about separate positions for two pieces. If it's a material that will fray, you'll need an extra fold to make this work.

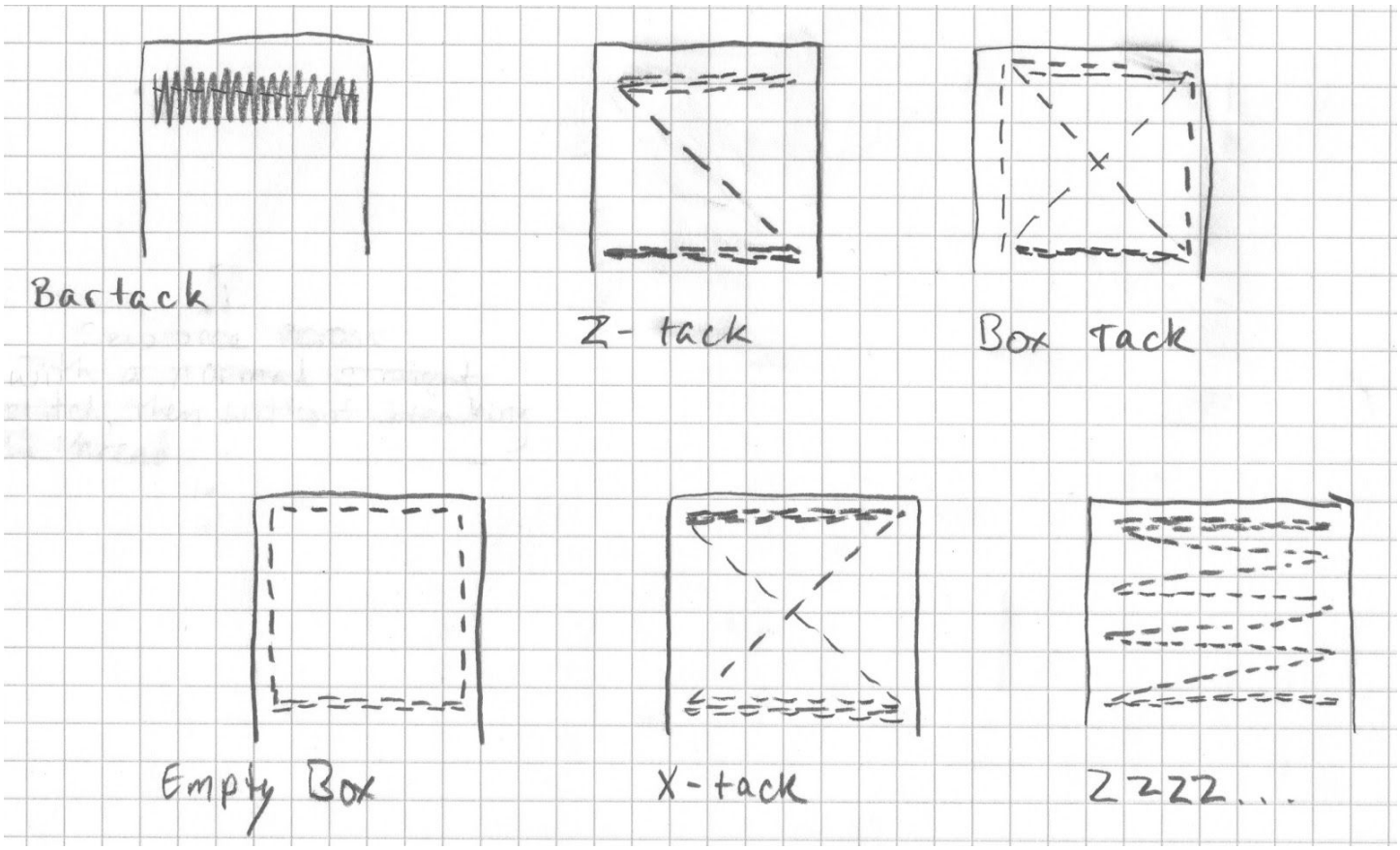
For the self-binding method, the piece that will be folded over to create the binding will need a seam allowance about twice the width of the other seam allowance. For a double-folded self-binding (in other words, hemmed first) you'll need 2 ½ to 3 times the normal seam allowance. If you use self-binding on the backpack, the self binding will become a hem when you reach the lid portion.

Finishing plain edges:

Around the openings of both the backpack and the tote bag, and the edges of the backpack's lid, are edges that aren't seamed to other pieces. You can use similar methods to finish them: either hem them (fold over the edge once or twice, then sew it down) or bind them. Whichever method, you'll need to decide BEFORE you cut pieces out; binding a plain edge does not require additional seam allowance to be added to the finished dimension, but hemming does.

Ways to sew down straps to the middle of a panel:

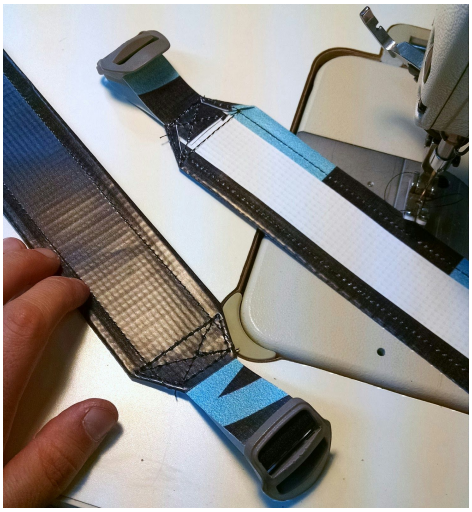
Keep in mind how much stress a given strap is likely to take when you decide how to sew it down. You can just backtack (sew back and forth) over the end of it, or you can use a more complicated kind of tack.

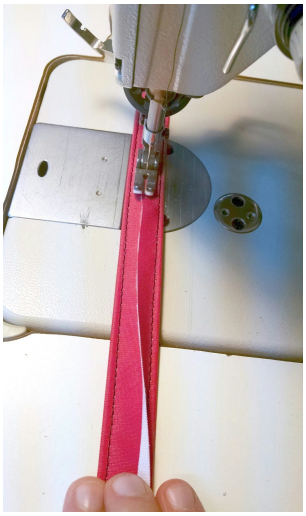


To make a bartack, start by sewing across once with a straight stitch. Then set your machine to sew a relatively wide zigzag with a short stitch length, pivot 180 degrees around the needle, and go back the way you came.

The Z-tack is a really useful one because it spreads the stress over more ground than the bartack or backtack, but you don't have to do too much pivoting. Just sew back and forth a couple of times, sew a diagnal ending up somewhere else, and sew back and forth again. The X-tack is the same, only you pivot again and end where you started. The box tack looks nice if you do it neatly, and it's quite sturdy, but it requires a lot of stopping and pivoting, so it's difficult if you're working with large and ungainly pieces. The rest should be self explanatory.

Ways to make straps:





A very simple way, depending on the material, is to just cut a strip to the width you need. The 1" straps on the WMOS banner backpack are only that. If you need a little more structure, you can cut them wider, and then hem the edges. These backpack straps are done that way, then tacked to the narrower strap to hold the buckle.

On the WMOS tote bags, the edges of the banner were folded over and adhered together. So I just used the edges to make the handles.

I made the ¾" straps on the red banner backpack by doing the same, only overlapping the hemmed edges in the middle and then stitching them down.

Another way is to sandwich a few layers of fabric together and then bind the edges (using the same binding material as for the rest of the bag, for example). I made the straps for the preschooler bag by putting a layer of spacer mesh together with a layer of Cordura, and then bound the edges with more Cordura to give them a little padding.

For the red banner backpack, I sewed a tube with the right sides of the fabric on the inside, turned it inside out, and topstitched the sides so that it stays flat.

I even made the drawcord out of the same banner: it's just a ½" strip folded in half and stitched down its length. The fabric doesn't fray, so there are lots of good ways to make straps out of it!

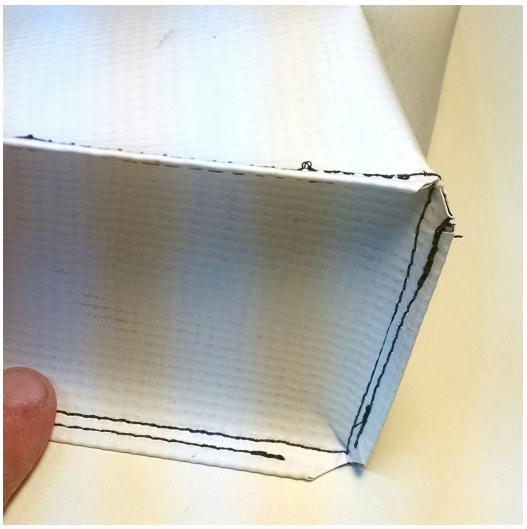
You can also cut strips out of some types of leather, vinyl, faux leather, etc; or repurpose belts, luggage straps, or any number of other things.

More tips about binding and self-binding:

There are lots of products you can use for binding. Grosgrain ribbon is common, as is bias tape. Recycling bicycle inner tubes works well, too - see the Wedge-style Seat Pack for more about that. You can also cut strips from other materials, like I did with the red banner. I did it some with the Cordura for the preschooler backpack, but that's often more complicated with most woven materials because you have to fold the edges over to keep the binding from fraying.

There are sewing machine attachments for sewing binding, but it can be done by hand as well with a bit of patience. I find it easier if I crease the binding with my fingernail before sewing. Also, if you try keeping just a tad more of it on the underside than on top, you're less likely to unwittingly drift the stitching so it isn't catching both sides anymore.





Getting around corners can be tricky. With a bulkier material, you really have to clip them off of the side panels at least. With a softer or thinner material, you can often just sort of wrangle the binding around them. You can also cut them off entirely, and sew the binding in separate segments.

The second two photos above are from self-binding seam allowances that will end up on the inside. The first of these shows the extra seam allowance ready to be folded over; the second shows nice, neat looking corners with the edges bound. When the bag is turned right side out, the corners are very clean.