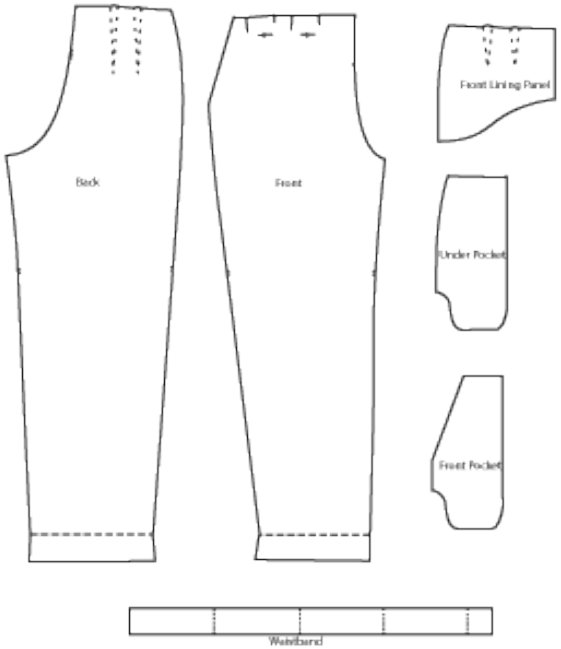
going from 2-D to 3-D

giant creature by Donna Wilson (right)

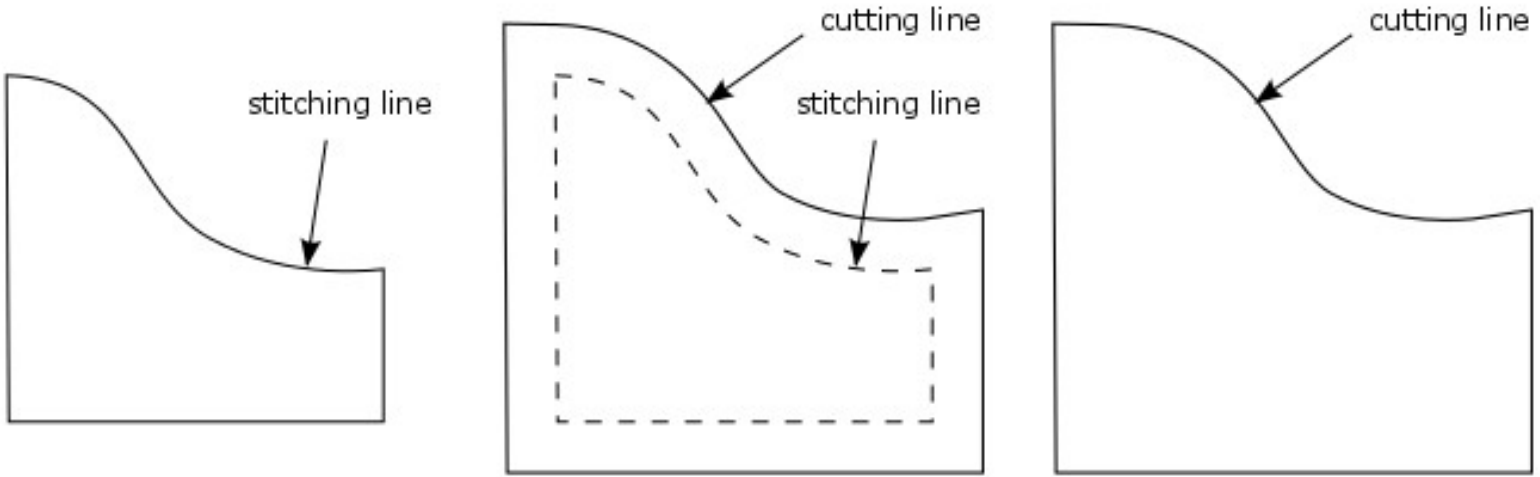
3-d form achieved by stuffing flat sewn shapes

3-d form achieved through patterning

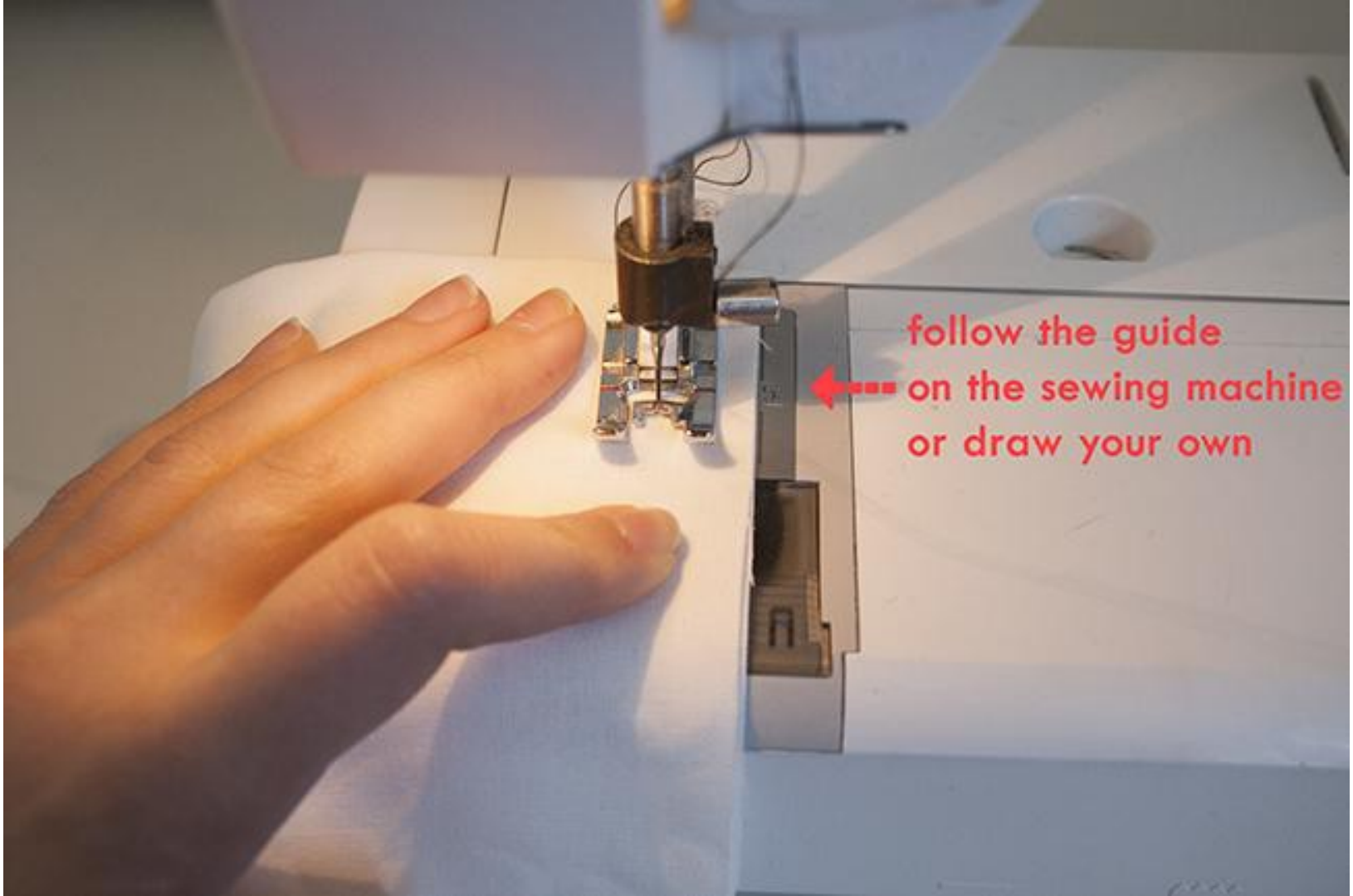
Patterns - template created for different parts of an object



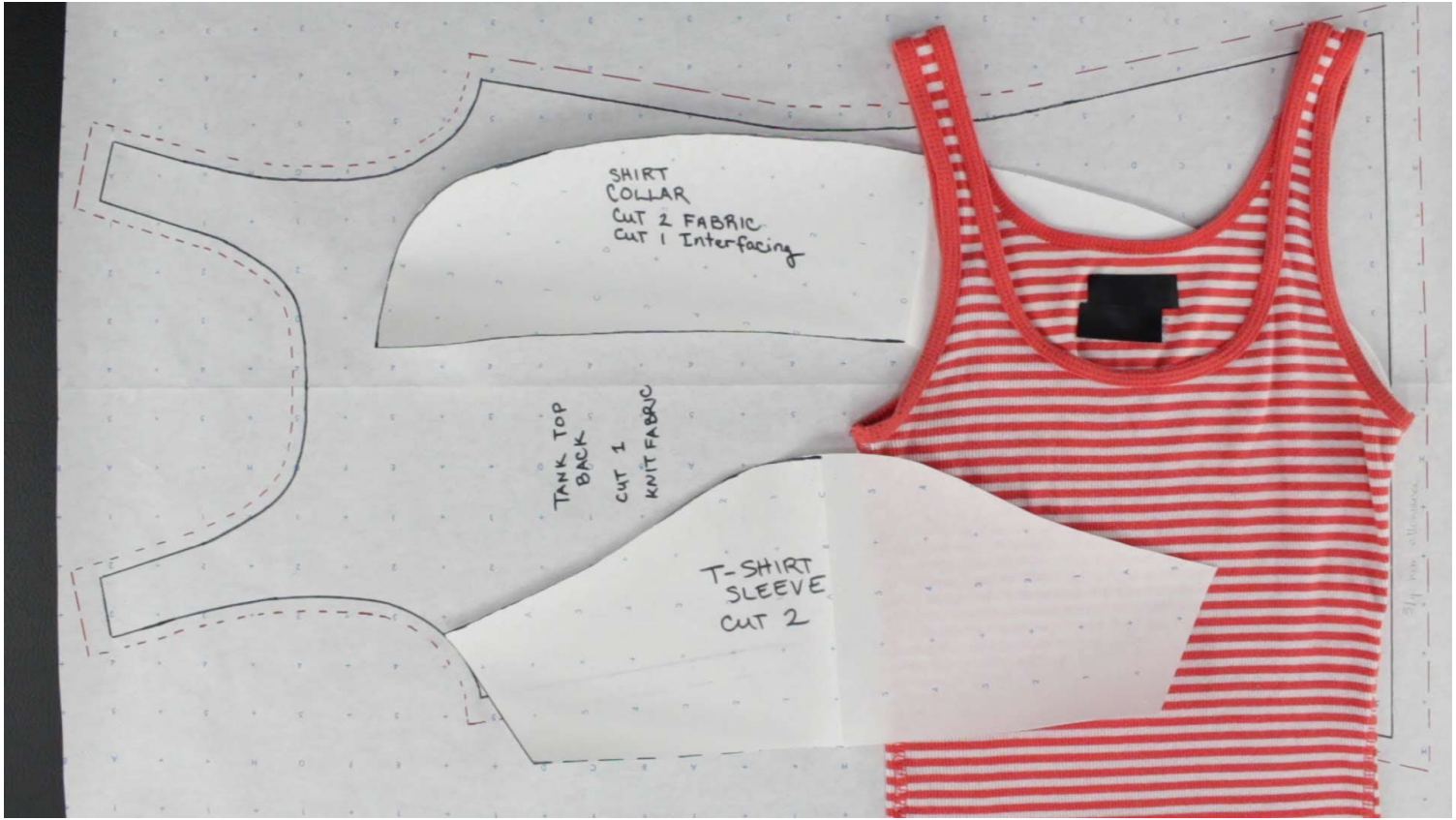
Seam Allowances (inlay): area between edge of fabric and stitching line



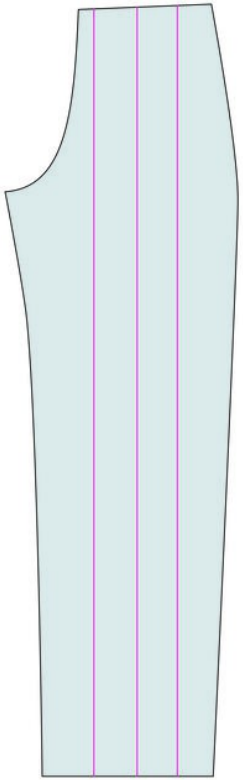
Seam allowance range: ¼” – ½”

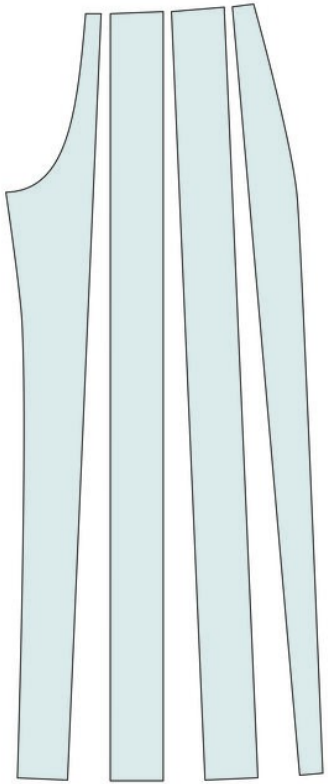

follow the guide
on the sewing machine
or draw your own

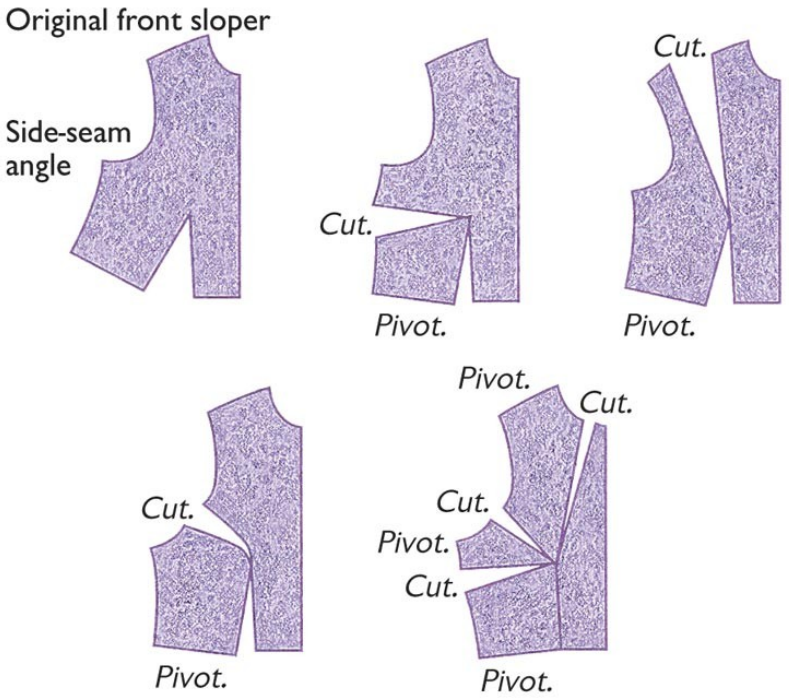
Making your own patterns



Slash and Spread Technique

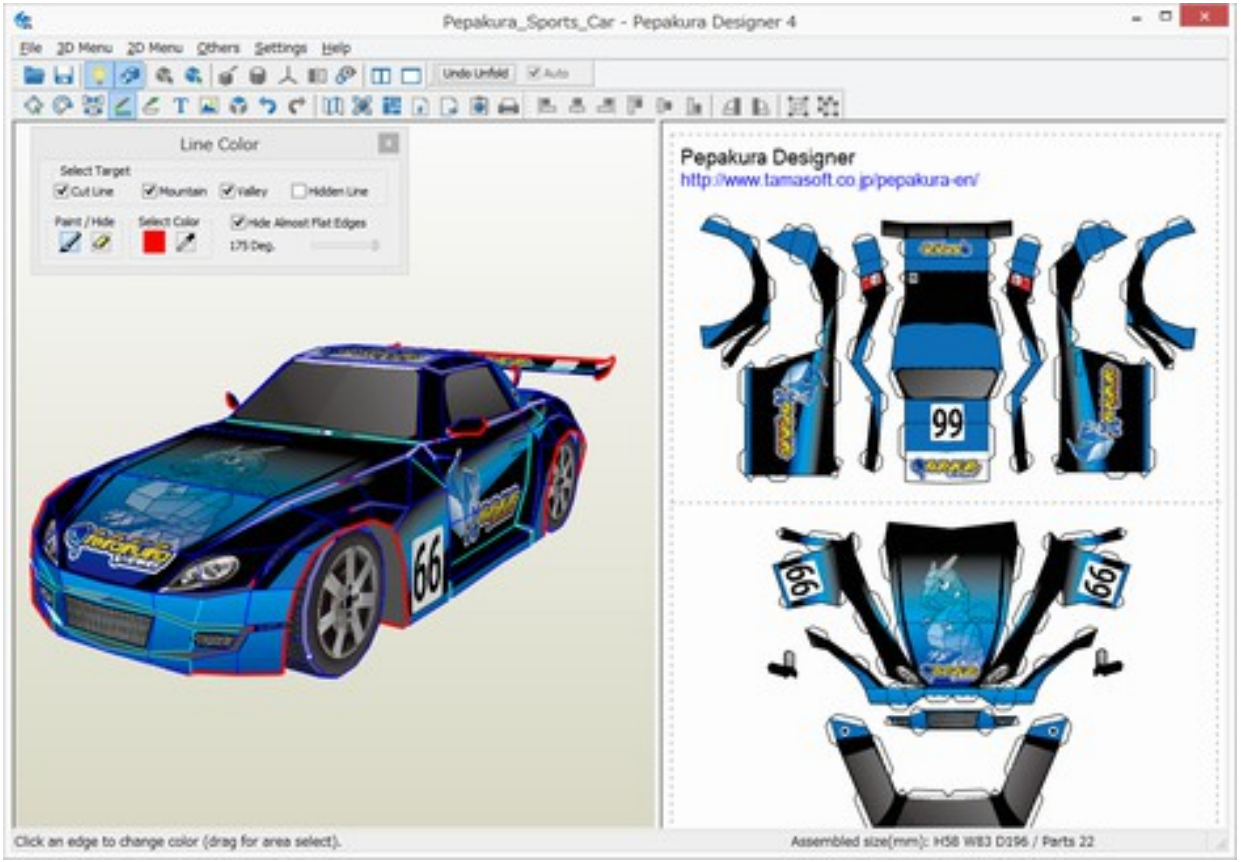






3D Models to 2D Patterns

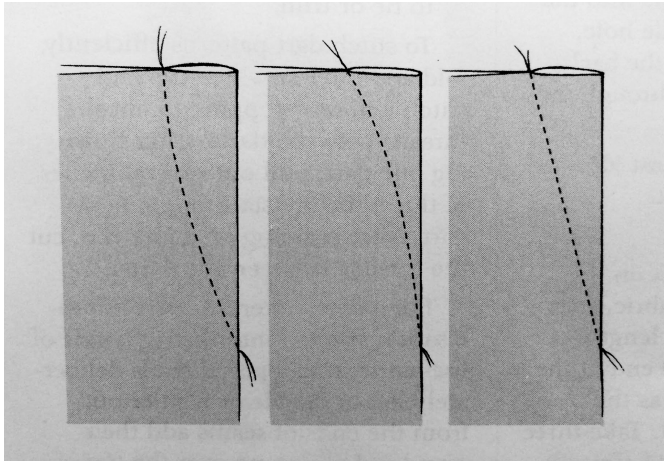
Pepakura

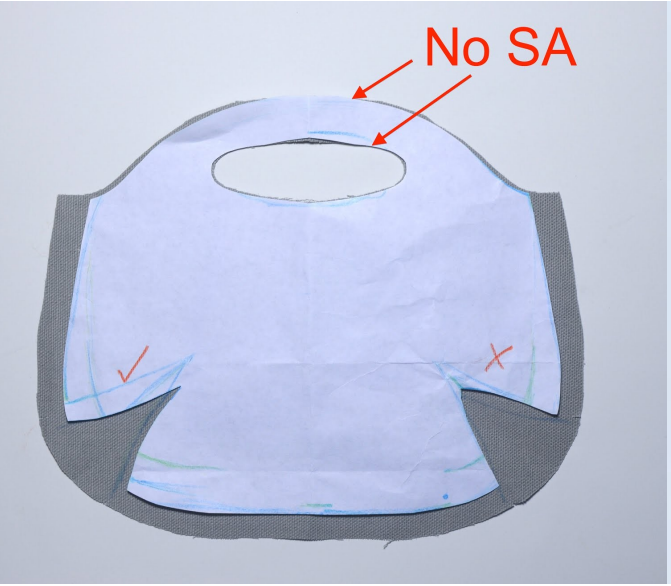


http://www.instructables.com/id/Making-patterns-from-3D-objects-sans-computers-or-/?ALLSTEPS

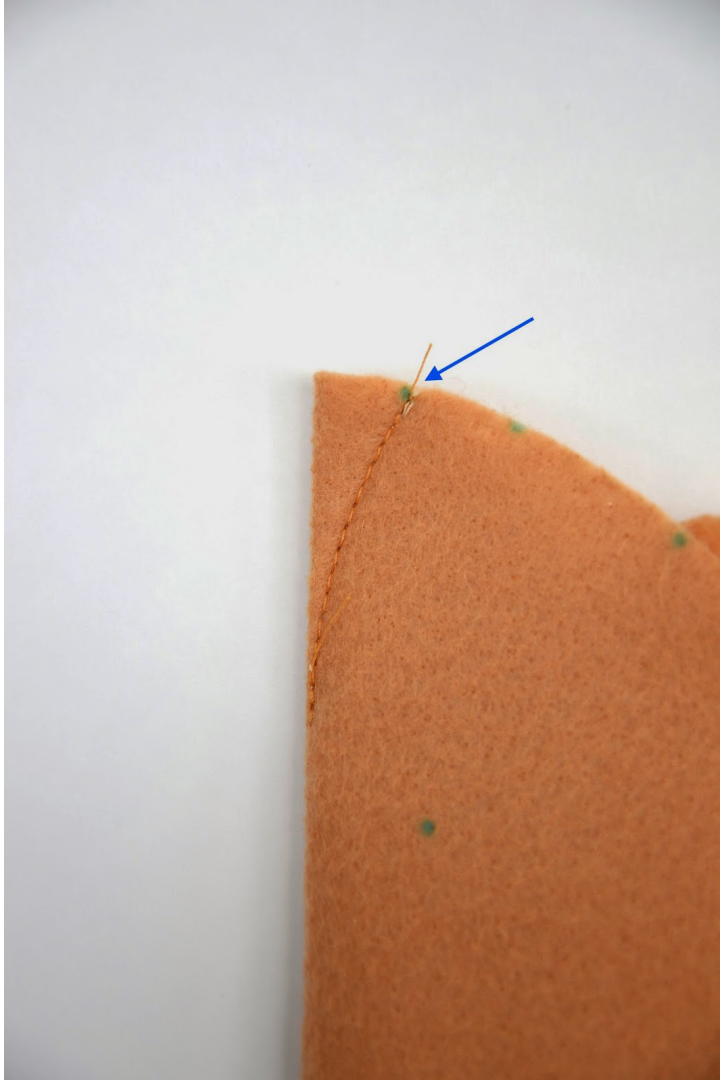
Darts

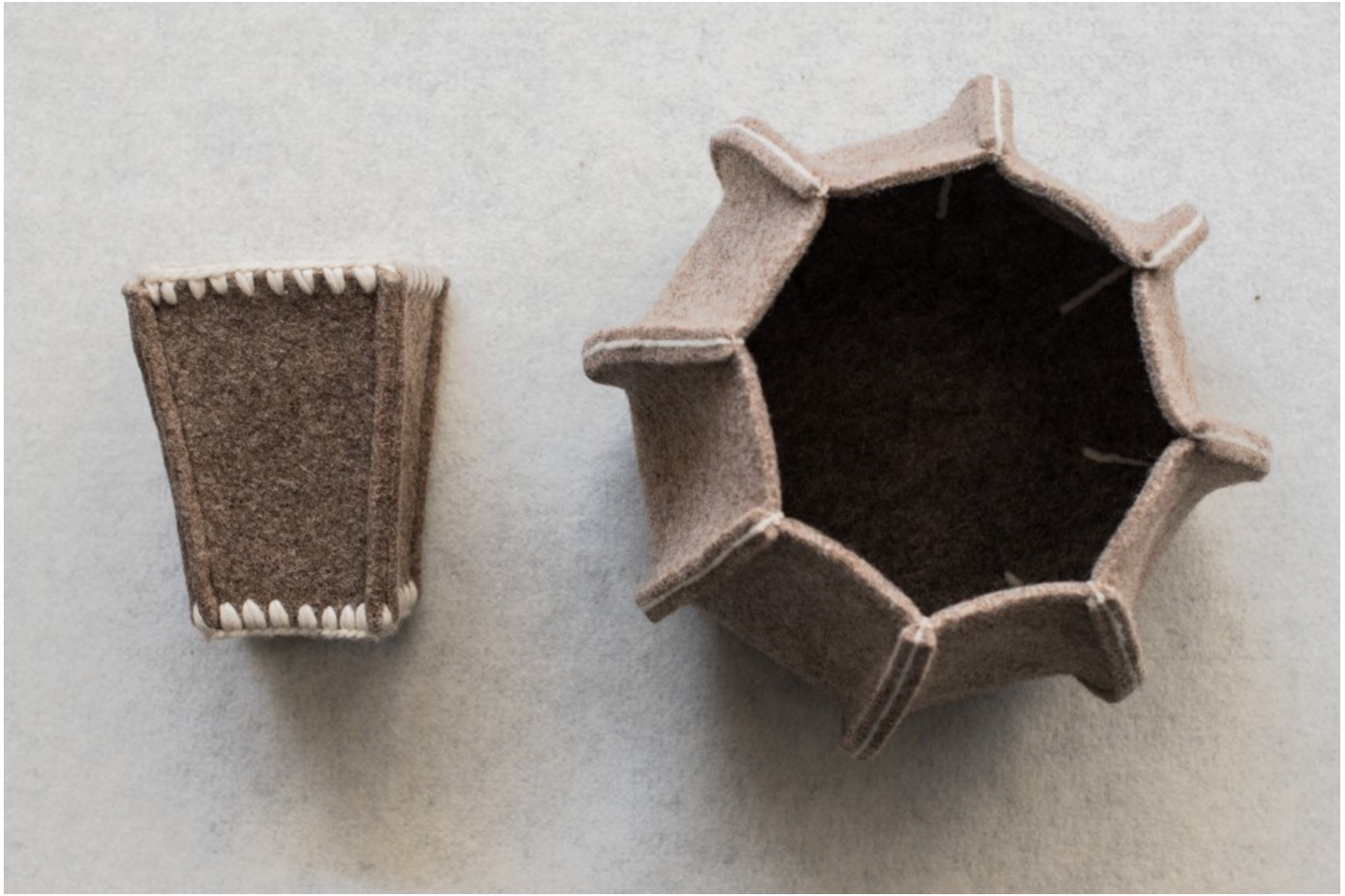
Segment of fabric folded (or removed) and stitched to create rises or drop in the structure

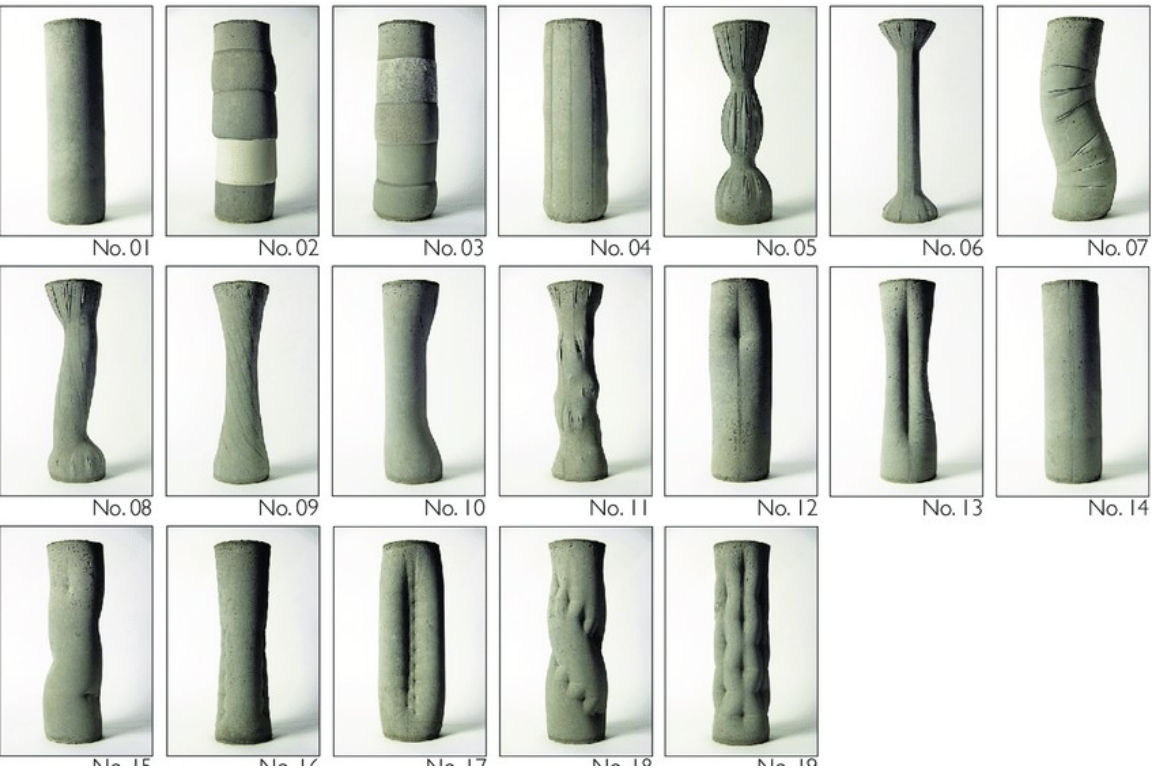




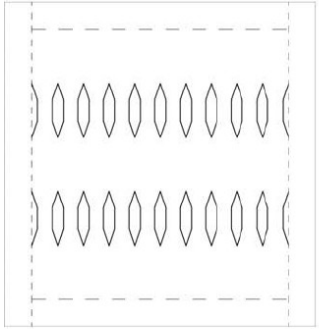
http://www.ikatbag.com/2014/12/subtleties-of-drafting-darts-part-i.html



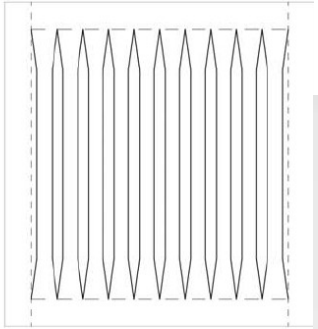




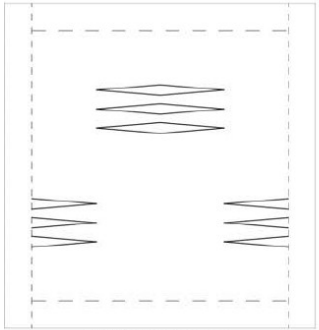
Remo F Pedreschi The University of EdinburghÂ



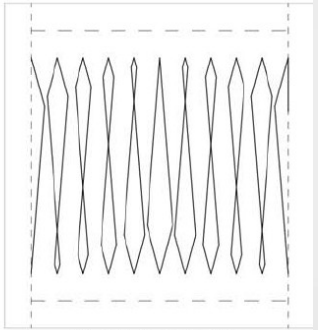
D1: Double waisted column



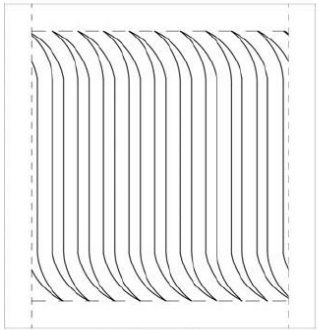
D2: Flared capital and base column



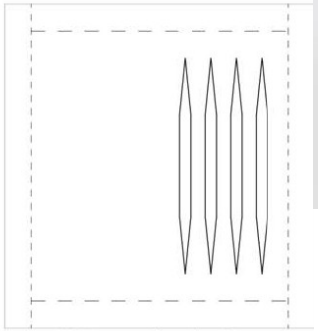
D3: Bust dart column



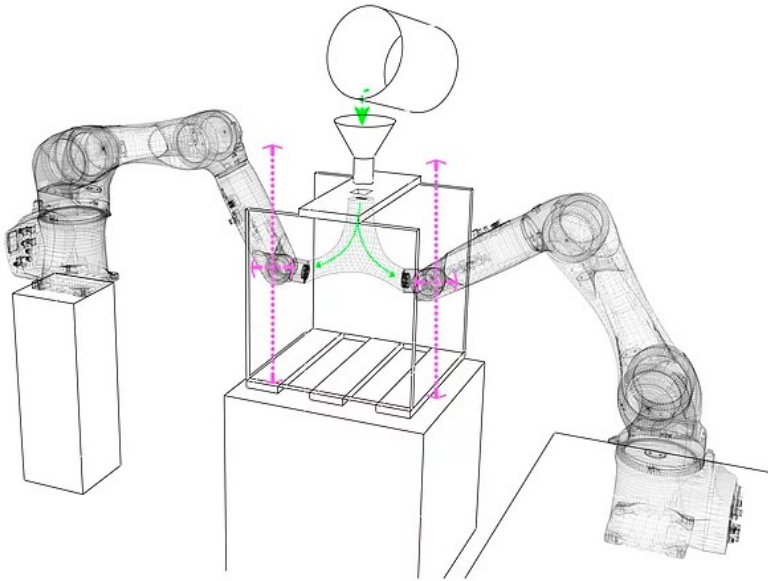
D4: Offset capital column



D5: Twist column



D6: Asymmetric waist column

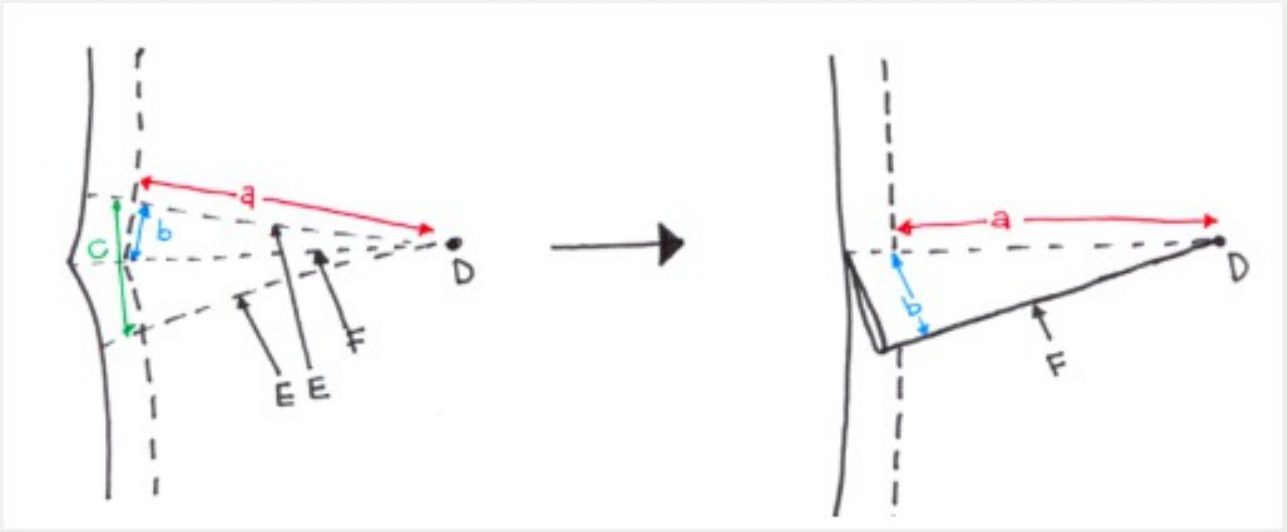


Project update May 2014 – Material Reduction: Efficient Fabric-Formed Concrete, Winnipeg, MB, Canada

The branching columns shown here are also formed from flat sheets of fabric using another CAST formwork invention.
Photo: CAST, University of Manitoba.

https://www.formfounddesign.com/fabric-forms

On the WS, it gets more interesting. Here is a single-point dart.



a = dart length (excluding SA bit)

b = depth of dart

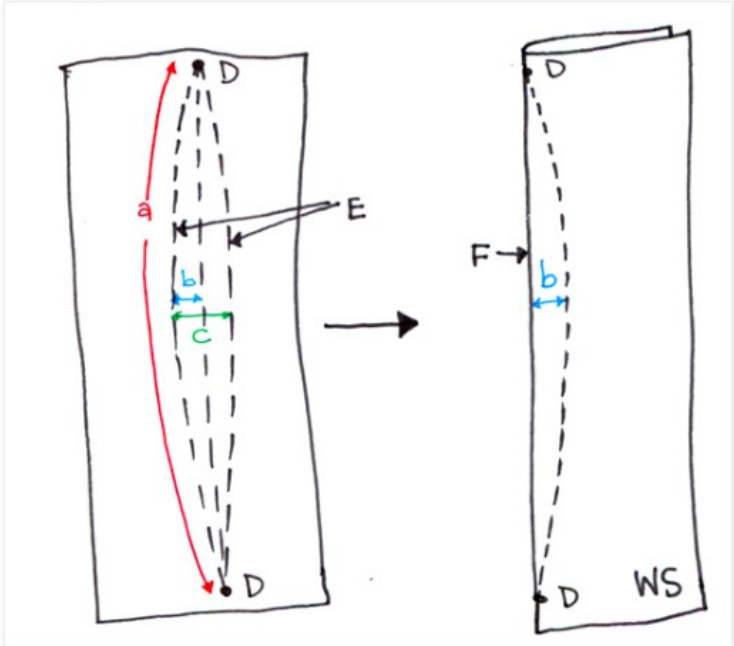
c = width of dart

D = dart apex

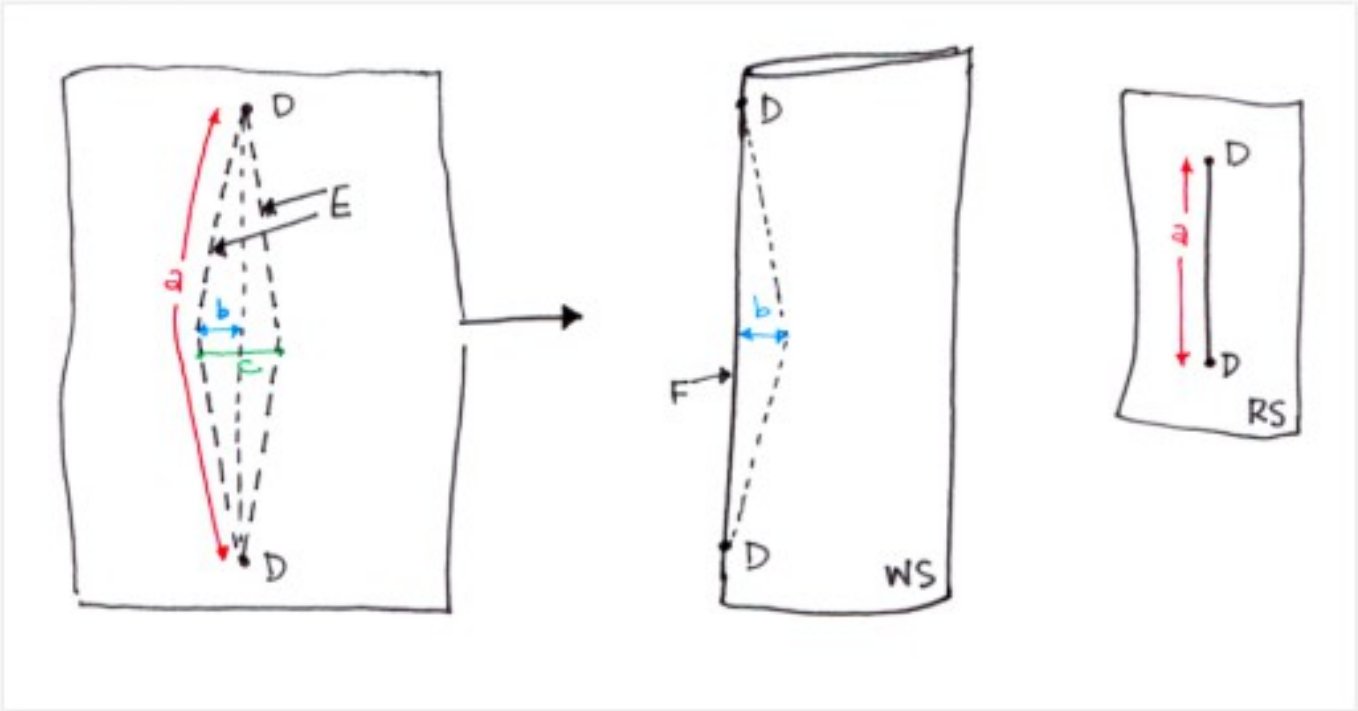
E = dart leg

F = fold of dart

Here is a curved dart - this one is convex, so it's bulgy like a blimp. It has curved dart legs.



Here is a double-point dart. This one is a straight dart (i.e. it is diamond-shaped with straight dart legs). All the annotations are the same as with the single-point dart.

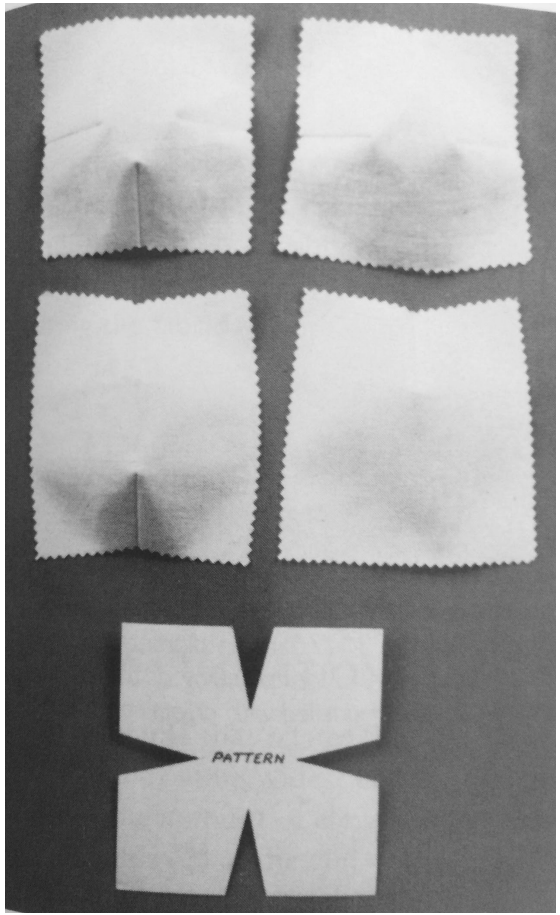


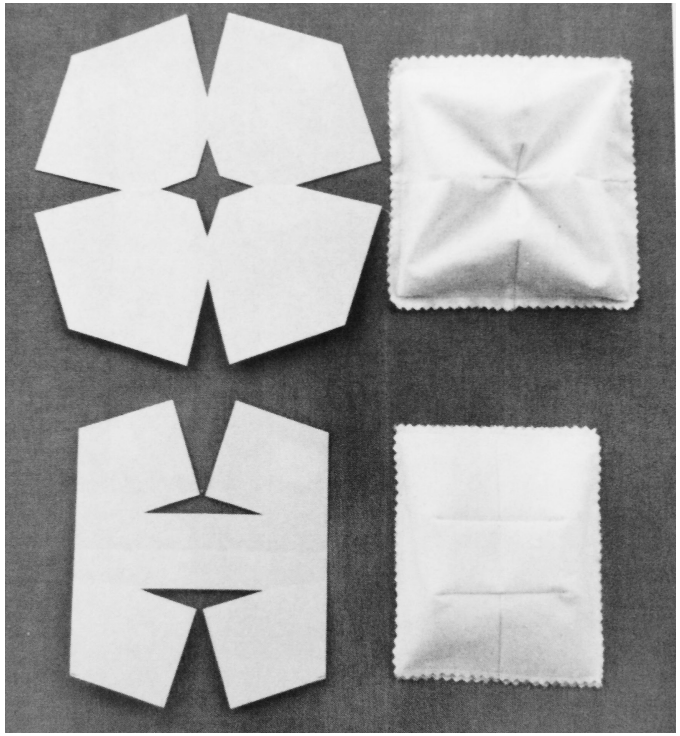
http://www.ikatbag.com/2014/12/subtleties-of-drafting-darts-part-i.html

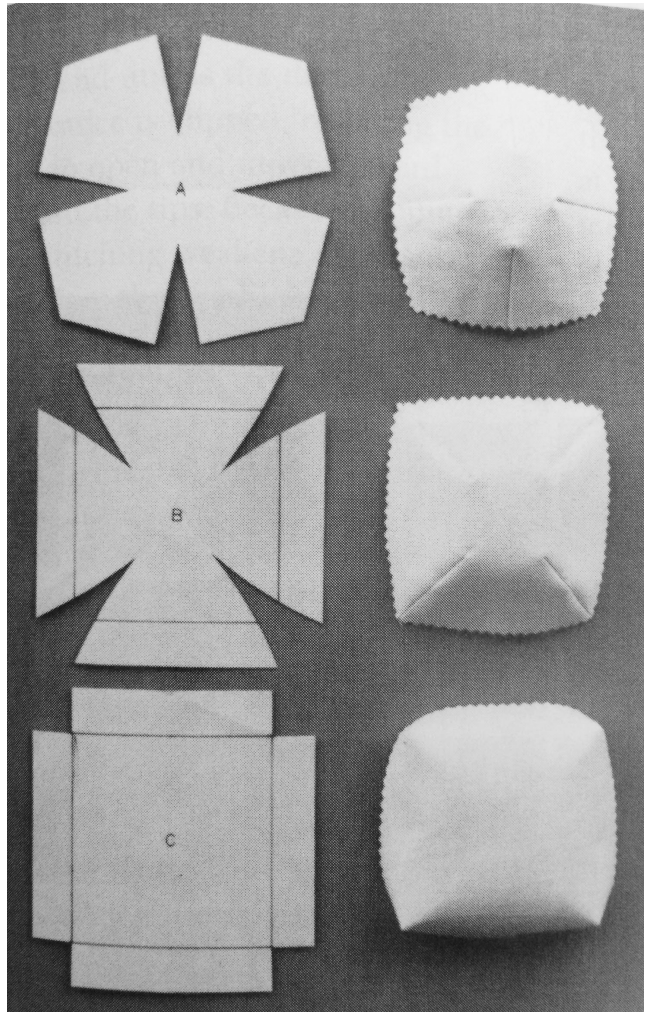
Demo: Darts

Create two patterns for making darts on a 6” x 6” piece of fabric.

Exchange your patterns with two other classmates to sew another dart.







The Art of Manipulating Fabric, Colette Wolff