

BIKES AND BLOOMERS

VICTORIAN WOMEN'S
CONVERTIBLE CYCLE WEAR
SEWING PATTERNS

#3 THREE PIECE CYCLING SUIT

A cycling costume inspired by
Henrietta Müller's 1896 UK Patent #8766

PATTERN #3

THREE PIECE CYCLING SUIT

(JACKET, LOOPED SKIRT & ALL-IN-ONE BLOOMER)

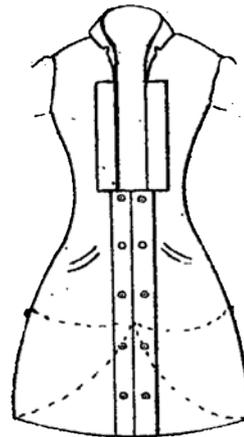
DESIGN FEATURES

This is an unusual patent because the inventor addresses an entire cycling suit. Her three-part design features a tailored jacket, an ordinary A-line skirt that can be raised in height via loops sewn into the hem that catch at buttons on the waistband and an all-in-one undergarment, which combines a blouse and bloomer.

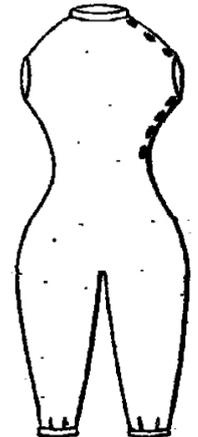
THE INVENTOR: HENRIETTA MÜLLER

(FRANCES) HENRIETTA MÜLLER of Meads, Maidenhead, in the County of Berks, Gentlewoman, registered a patent for 'Improvements in Ladies' Garments for Cycling and other Purposes' on 30th May 1896. She was 50. Born in Chile, Henrietta was educated at Girton College, Oxford, spoke six languages and was a passionate women's rights activist. She devoted her life to the advancement of women's freedom of movement in many spheres; such as agitating for equal pay for equal work and contraception to free women from continual child-bearing. She was once arrested for refusing to pay council tax in protest about women's inability to vote. She is also renowned for founding the 'Woman's Herald: Women's Penny Paper', the first newspaper written by women for women.

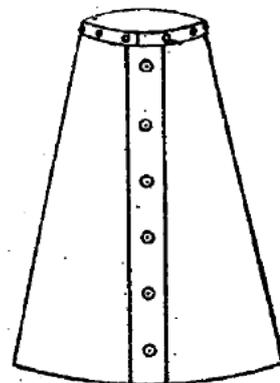
Given the breadth of her interests it is easy to see why Henrietta focused not just on a single item, but on an entire three-piece costume. She was committed to the idea of progress for women, and not content with trying to fix one element when she could see problems with the entire system. Notably, this cycling suit features nine pockets (and Henrietta encourages the reader to add more). She was acutely aware of the politics and practicalities of pockets for independent mobile women.



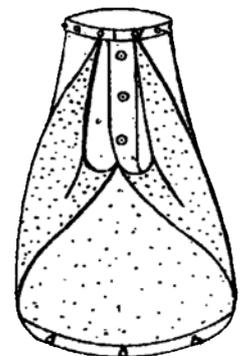
(Tailored Jacket)



(All in one bloomer-suit)



(A-line skirt)



(Looped skirt)

“These improvements consist in the form and combination of three separately constructed articles of ladies' costumes, so made as to afford special faculty and convenience when cycling.”

Henrietta Müller (1896)



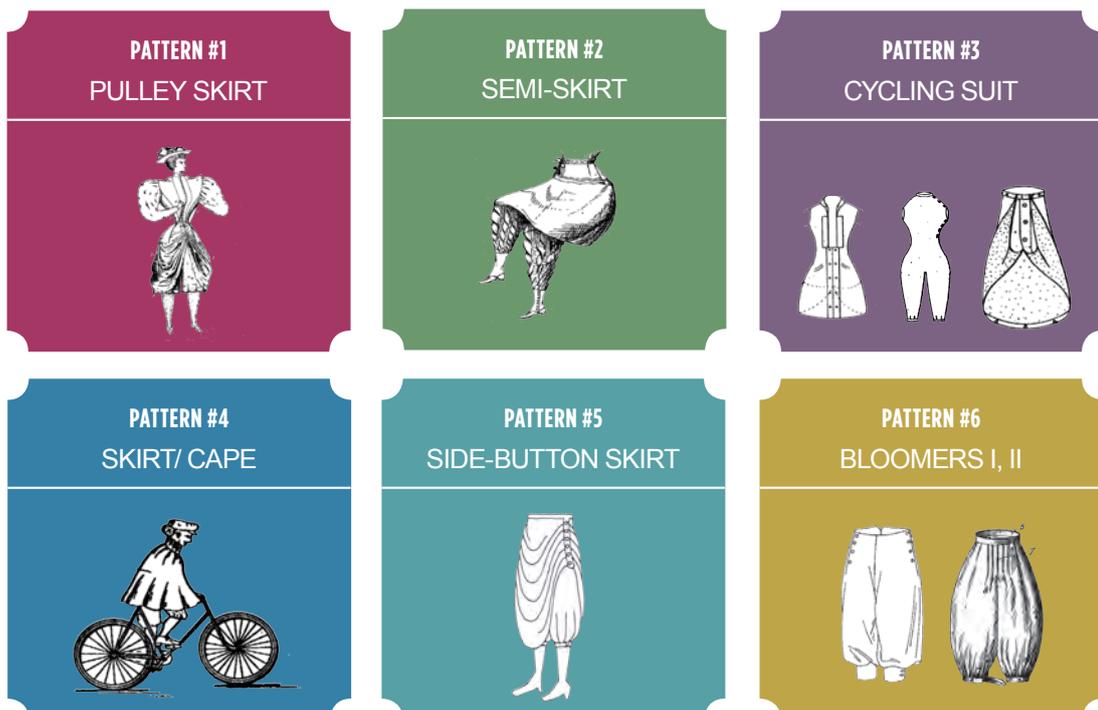
VICTORIAN WOMEN'S CONVERTIBLE CYCLE WEAR SEWING PATTERNS

Victorians enthusiastically took to the bicycle. Yet women had to deal with many social, political and material challenges to their freedom of movement. Cycling in 'ordinary' dress could be dangerous as it wrapped around pedals and caught in wheels. Wearing more 'rational' cycle wear, such as shorter skirts and bloomers, was more comfortable, but not necessarily safer as some parts of society were threatened by the sight of this progressive 'New Woman' carving new modes of gendered independence in public space. Onlookers sometimes hurled abuse and stones! However, nothing was going to stop women from cycling. In response, some creatively protested against restrictive ideas of how a woman should act and move in public through their clothing, by designing **convertible costumes** that enabled wearers to switch from street wear to cycle wear when needed. Luckily for us, these inventive women not only imagined, made and wore radical new forms of cycle wear - they also patented their designs!

Six sewing patterns in this collection (comprising a total of nine different garments) are inspired by convertible cycle wear patents lodged in the 1890s by inventive British women. They form part of an ESRC funded **Bikes & Bloomers** sociology project led by Dr Kat Jungnickel at Goldsmiths, University of London, with Rachel Pimm, Nadia Constaninou, Alice Angus and Britt Hatzius. More about the lives of these fascinating inventors is in *Bikes & Bloomers: Victorian Women Inventors and Their Extraordinary Cycle Wear* (Goldsmiths Press). Along with the book, these patterns bring to life some of the inspiring cycling, sewing and suffrage stories that have helped shape how we cycle today. They also (still) provide useful ideas for functional clothing that works on and off the bike. We look forward to seeing what modern sewing cyclists make with them.



PATTERN COLLECTION





SEWING PATTERNS

PATTERN #3

THREE PIECE CYCLING SUIT

(JACKET, LOOPED SKIRT AND ALL-IN-ONE BLOOMER)



Pattern #3 is a three-part design featuring a tailored jacket, A-line skirt that can be raised in height via loops sewn into the hem that catch at buttons at the waistband and an all-in-one undergarment, which combines a blouse and bloomer. **Requirements:** See individual patterns.

This pattern is approx UK size 12 and will need to be customised to fit as required. Minimal instructions are provided. See our mistakes, workarounds and suggestions at: bikesandbloomers.com

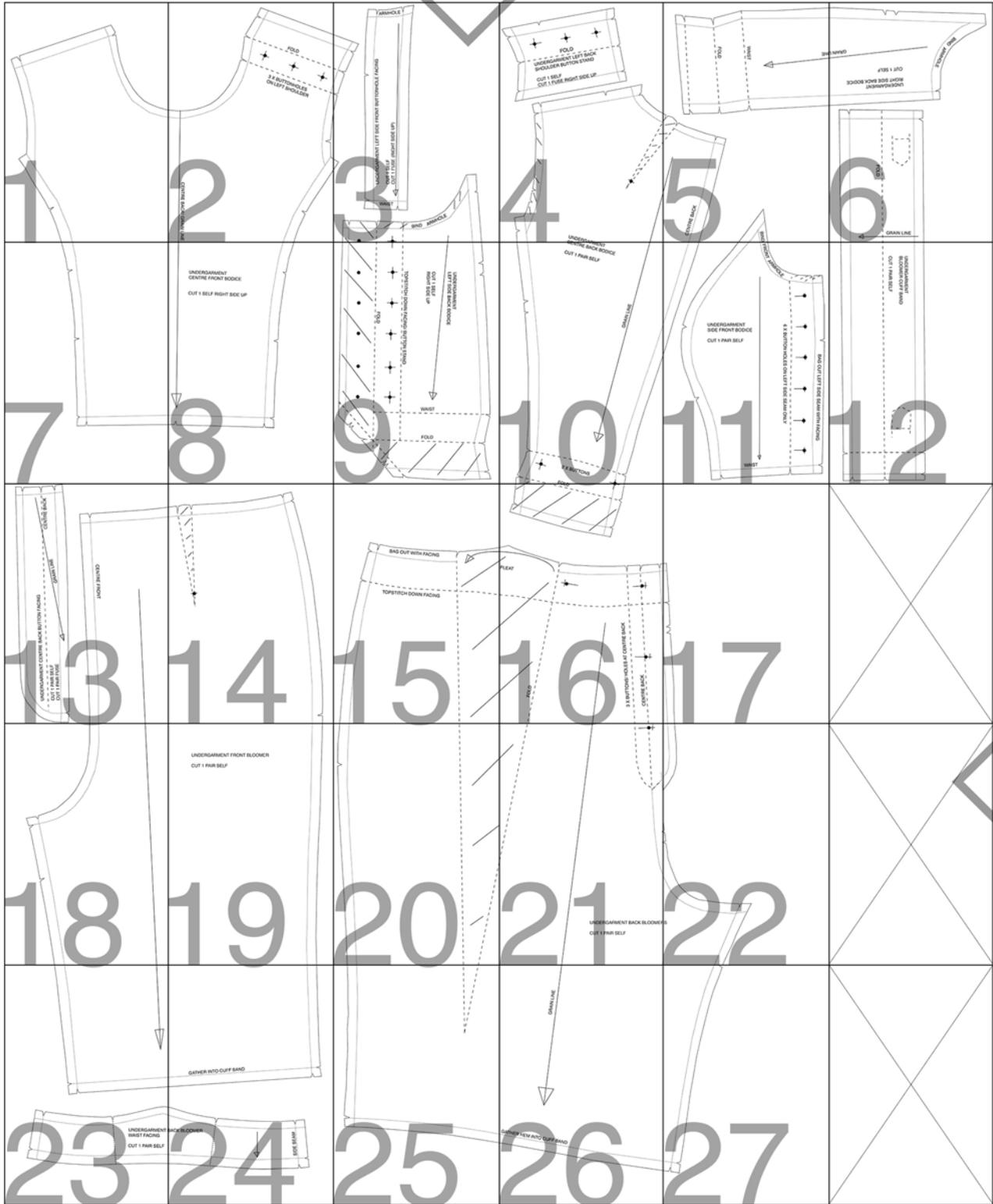
BIKES & BLOOMERS CONVERTIBLE CYCLE WEAR SEWING PATTERNS:

- #1 – Pulley cycling skirt
- #2 – Cycling semi-skirt
- #3 – 3-piece cycling suit
- #4 – Cycling skirt/cape
- #5 – Side-button skirt
- #6 – Cycling bloomers I, II

All sewing patterns are free to download. Profits from the sale of printed patterns go to the London Bike Kitchen, a DIY workshop. Please share your cycle wear creations with us on [Instagram](https://www.instagram.com/bikesandbloomers) [Facebook](https://www.facebook.com/bikesandbloomers) [Tumblr](https://www.tumblr.com/bikesandbloomers) [Pinterest](https://www.pinterest.com/bikesandbloomers) [YouTube](https://www.youtube.com/bikesandbloomers) [YouTube](https://www.youtube.com/bikesandbloomers) & www.bikesandbloomers.com

RESEARCH PROJECT
Kat Jungnickel
SILK LINING ARTWORK
Alice Angus
COVER PHOTO
Charlotte Barnes





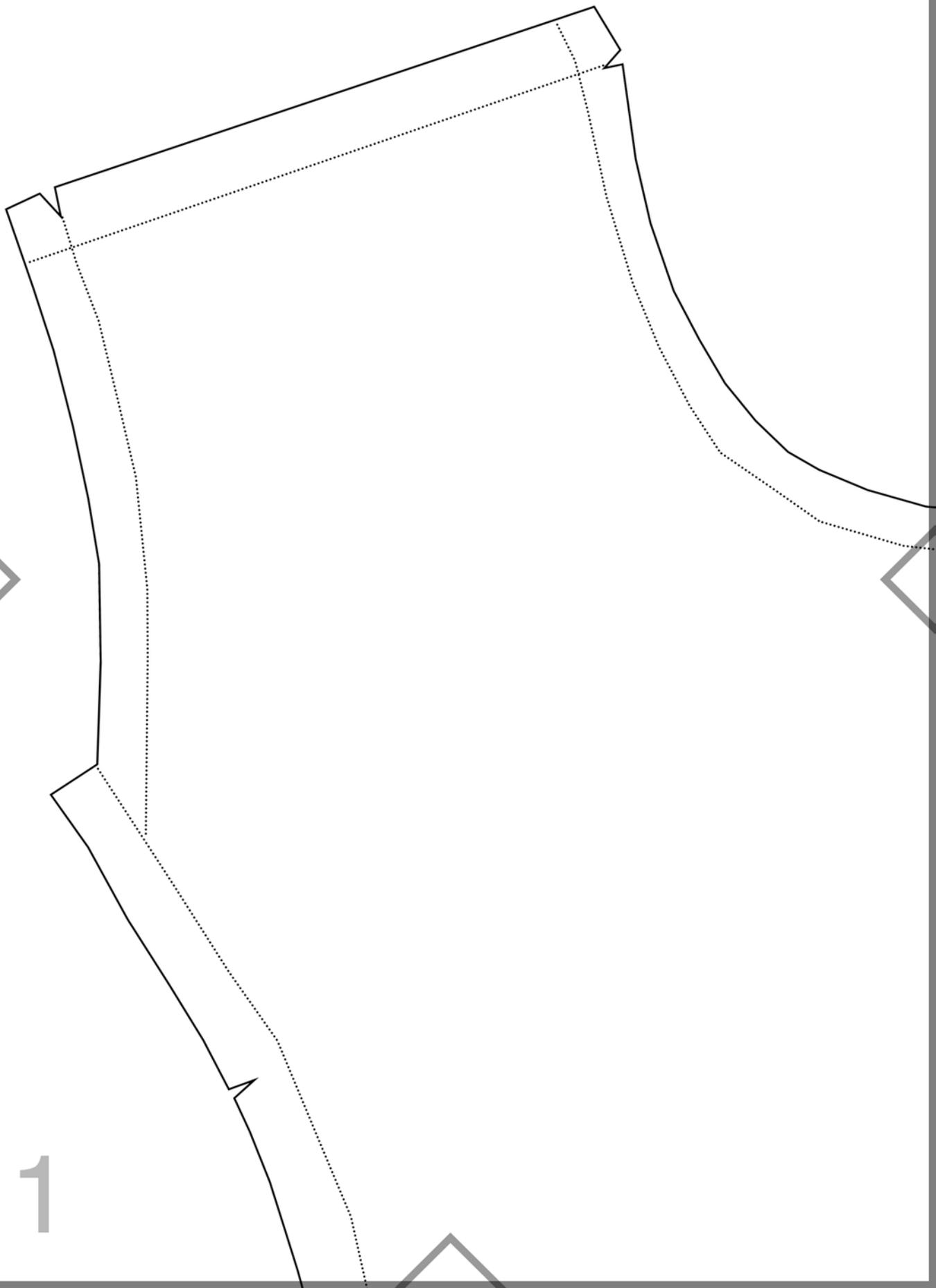
VICTORIAN WOMEN'S
 CONVERTIBLE CYCLEWEAR

SEWING PATTERNS

#3 ALL-IN-ONE
 BLOOMER

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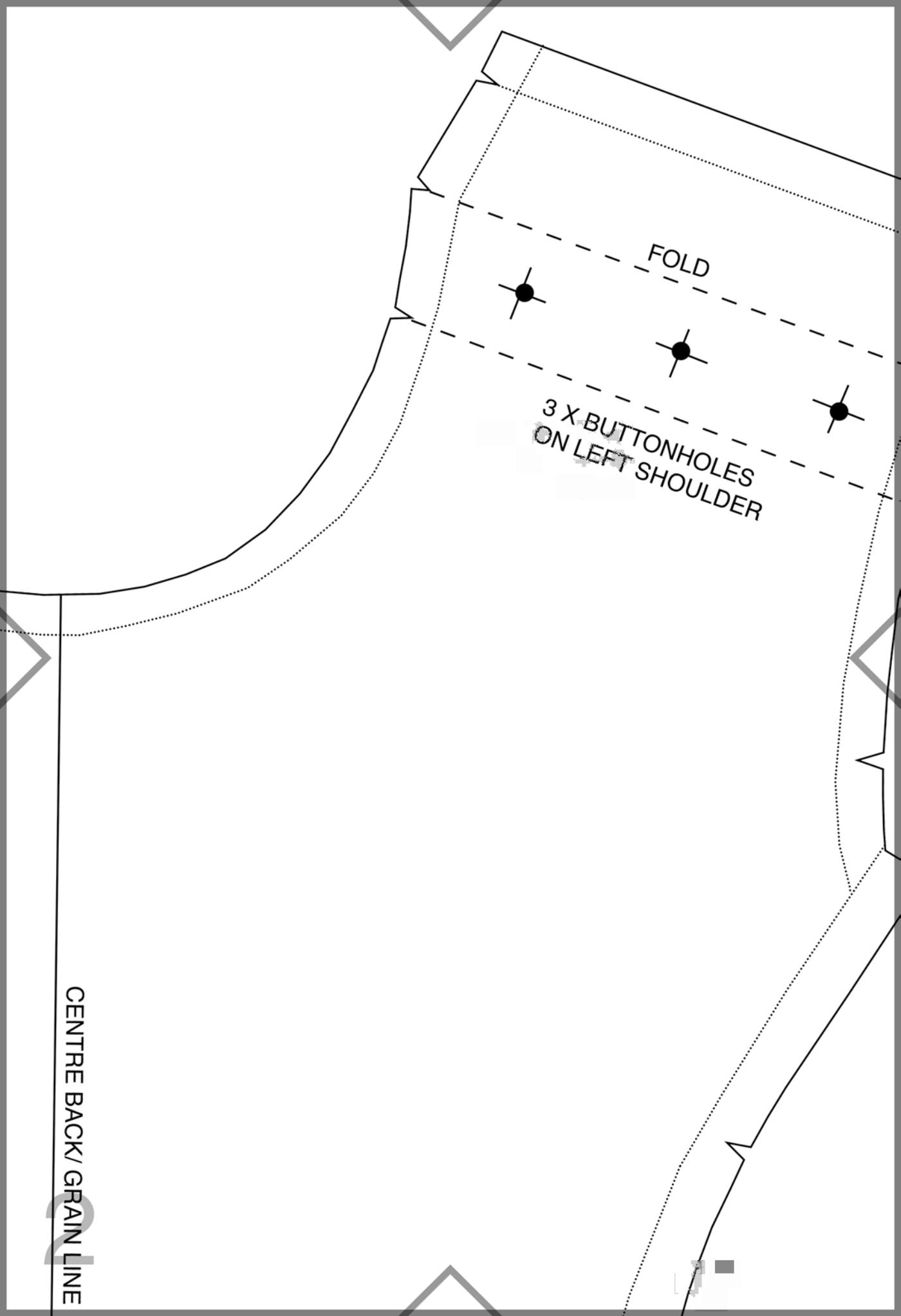


1

CENTRE BACK/ GRAIN LINE

FOLD

3 X BUTTONHOLES
ON LEFT SHOULDER



ARMHOLE

UNDERGARMENT LEFT SIDE FRONT BUTTONHOLE FACING

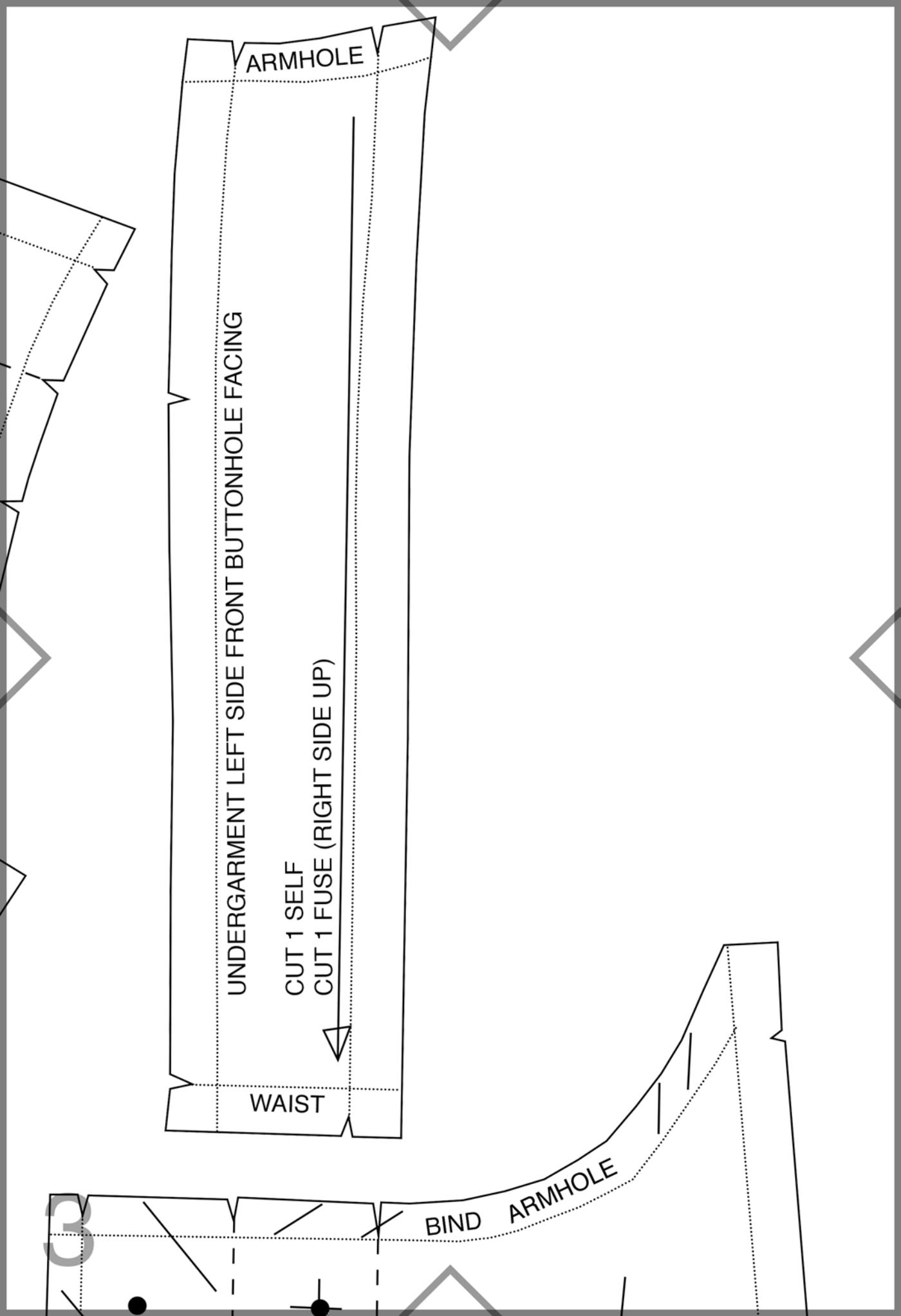
CUT 1 SELF

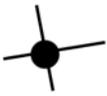
CUT 1 FUSE (RIGHT SIDE UP)

WAIST

BIND ARMHOLE

3





FOLD

UNDERGARMENT LEFT BACK
SHOULDER BUTTON STAND

CUT 1 SELF
CUT 1 FUSE RIGHT SIDE UP

4

UNDERGARMENT
CENTRE FRONT

5

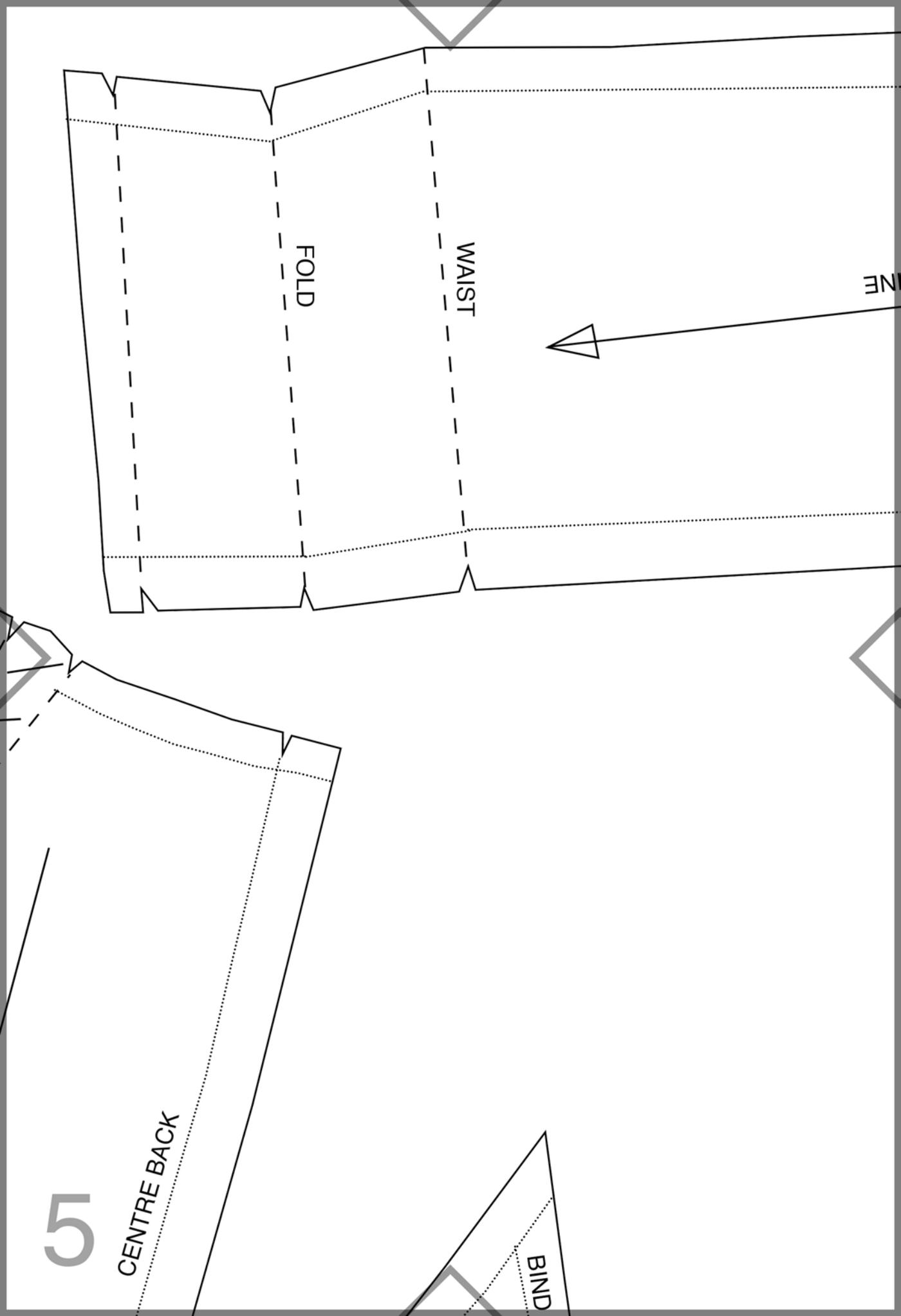
CENTRE BACK

FOLD

WAIST

BIND

NE



GRAIN L

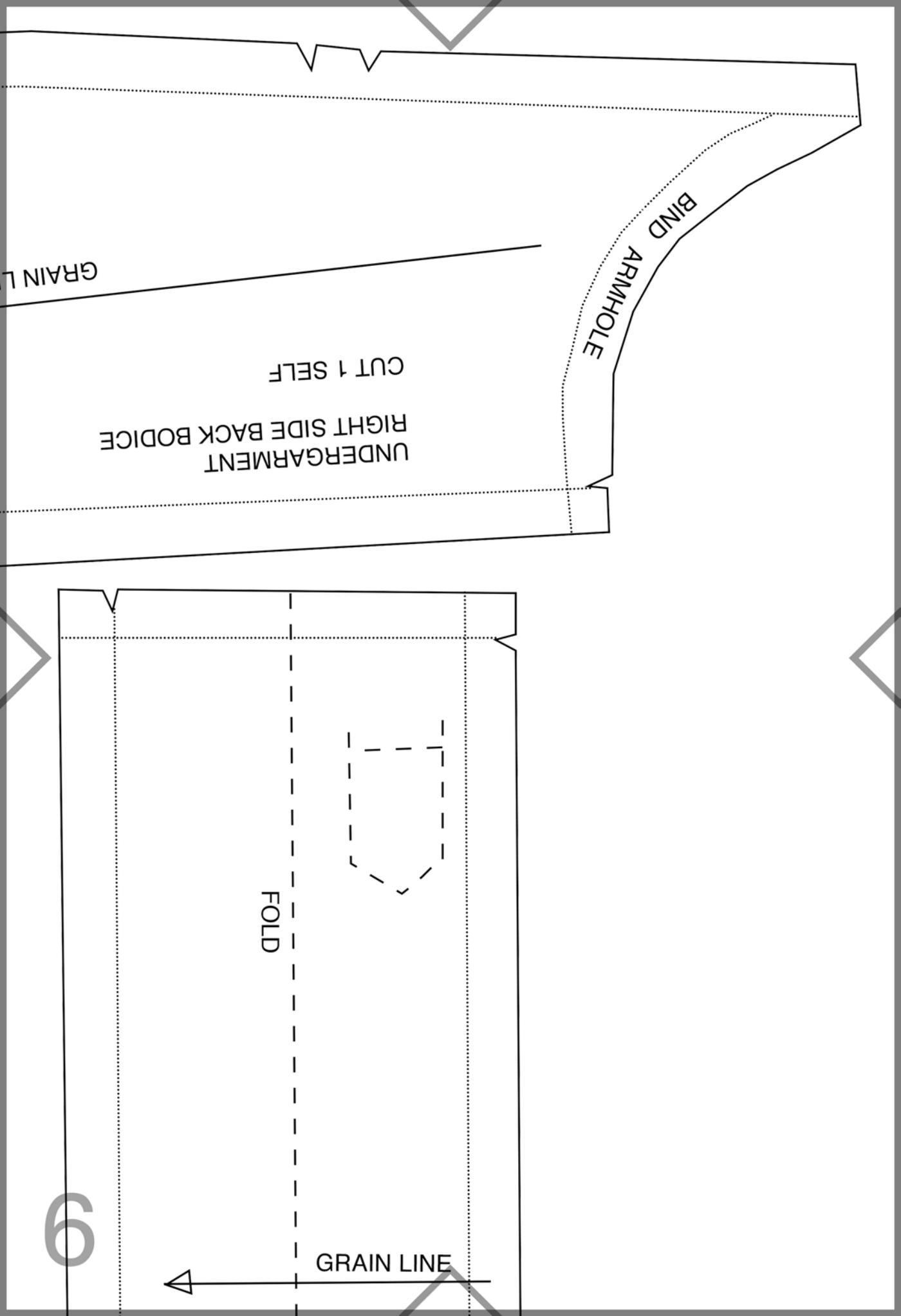
UNDERGARMENT
RIGHT SIDE BACK BODICE
CUT 1 SELF

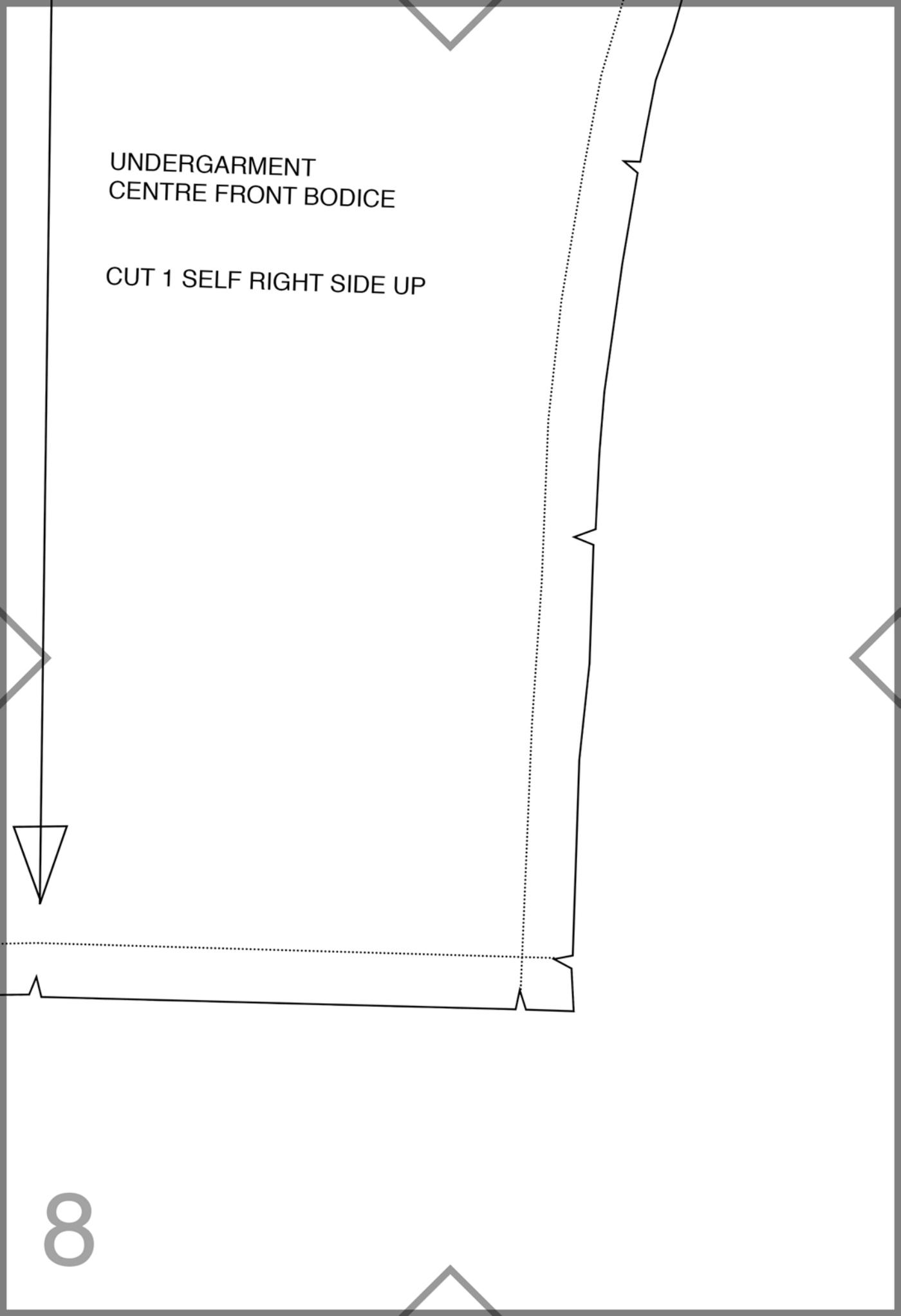
BIND
ARMHOLE

6

FOLD

GRAIN LINE





UNDERGARMENT
CENTRE FRONT BODICE

CUT 1 SELF RIGHT SIDE UP

UNDERGARMENT
LEFT SIDE BACK BODICE

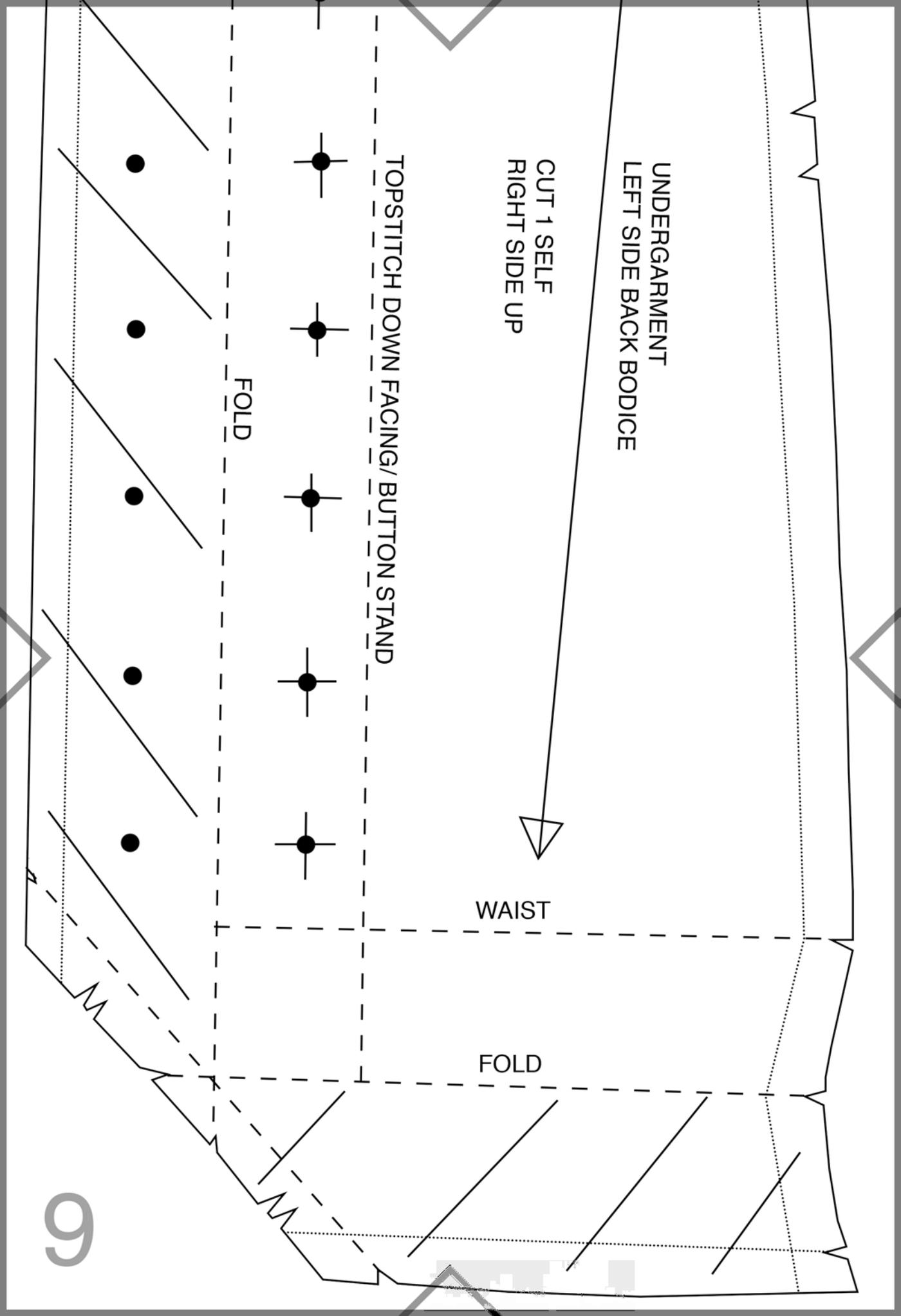
CUT 1 SELF
RIGHT SIDE UP

TOPSTITCH DOWN FACING/
BUTTON STAND

FOLD

WAIST

FOLD



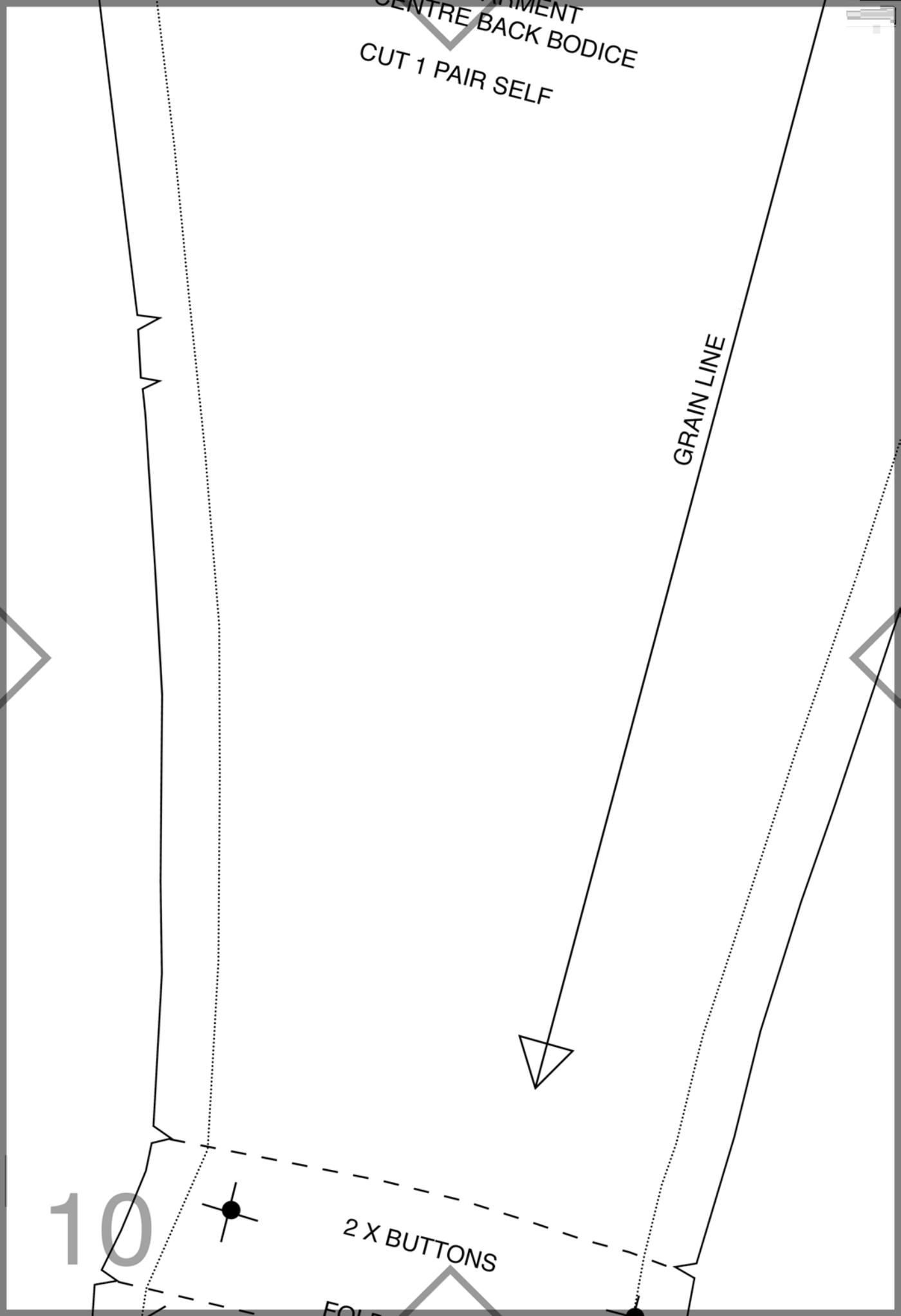
TRIMMENT
CENTRE BACK BODICE
CUT 1 PAIR SELF

GRAIN LINE

10

2 X BUTTONS

FOUR



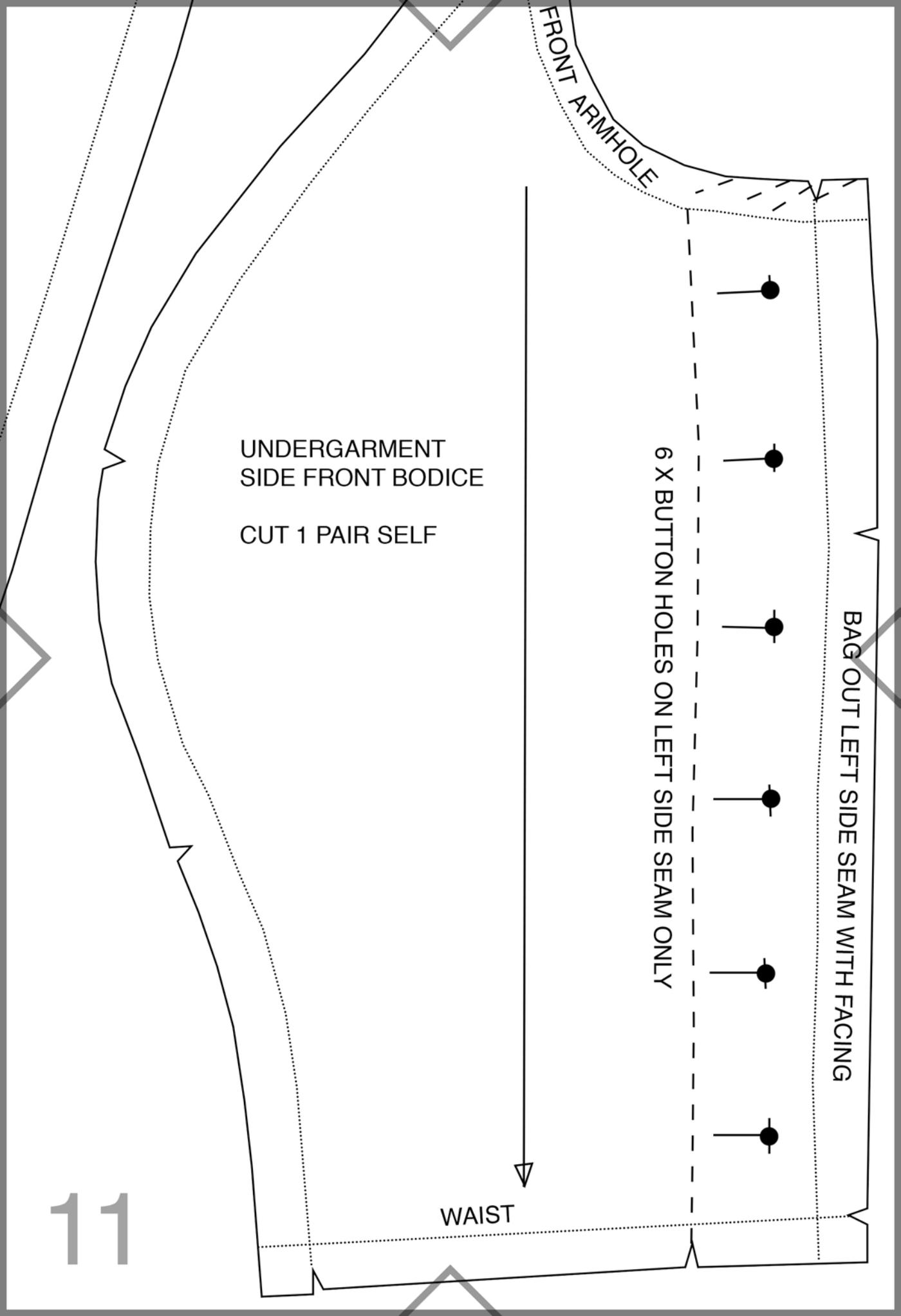
FRONT ARMHOLE

UNDERGARMENT
SIDE FRONT BODICE
CUT 1 PAIR SELF

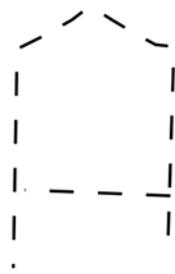
6 X BUTTON HOLES ON LEFT SIDE SEAM ONLY

BAG OUT LEFT SIDE SEAM WITH FACING

WAIST



UNDERGARMENT
BLOOMER CUFF BAND
CUT 1 PAIR SELF



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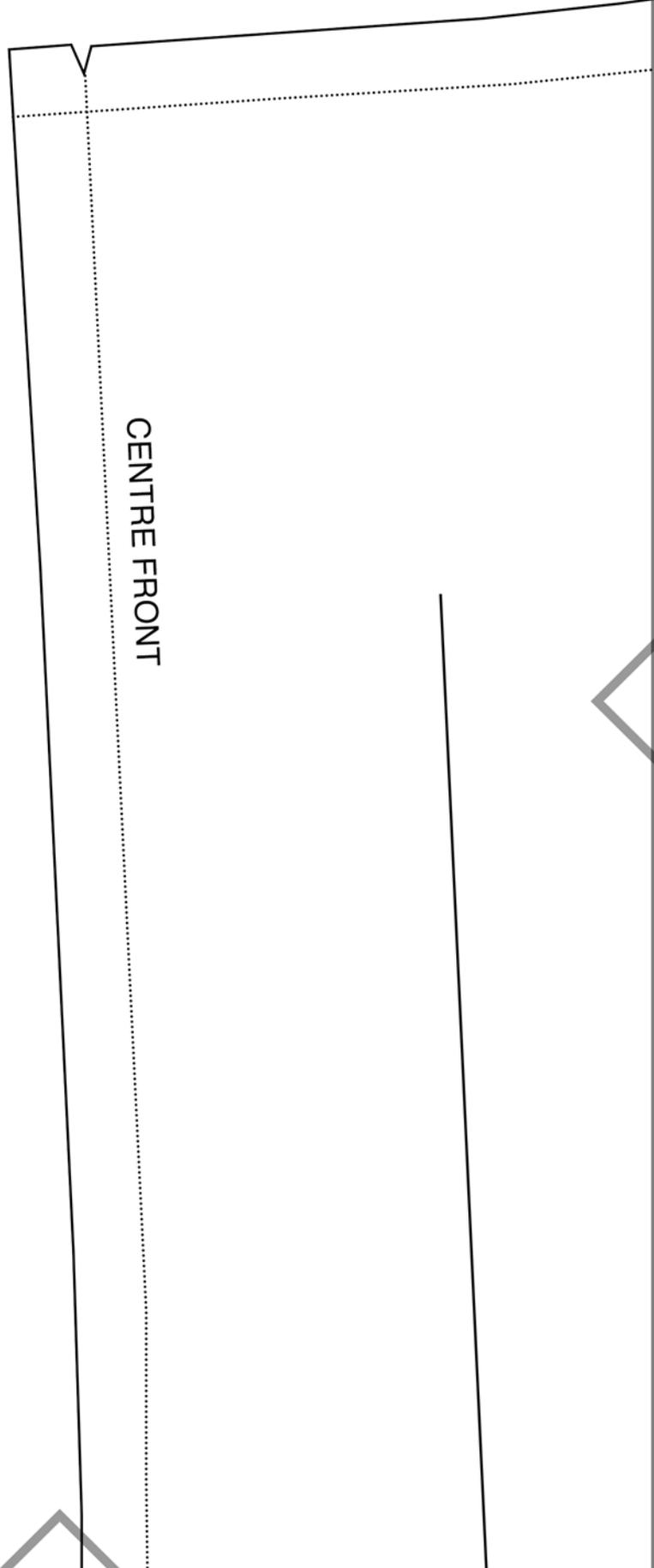
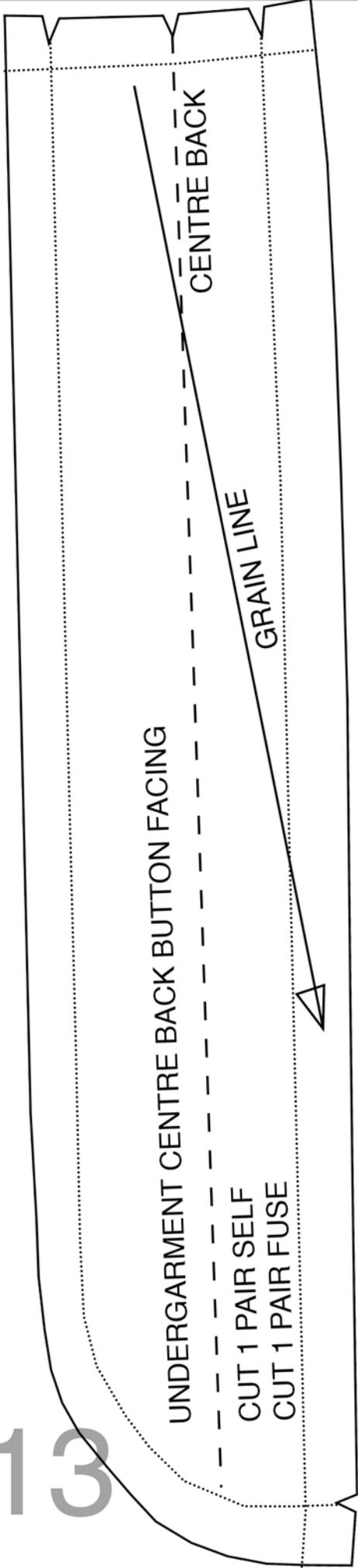
UNDERGARMENT CENTRE BACK BUTTON FACING

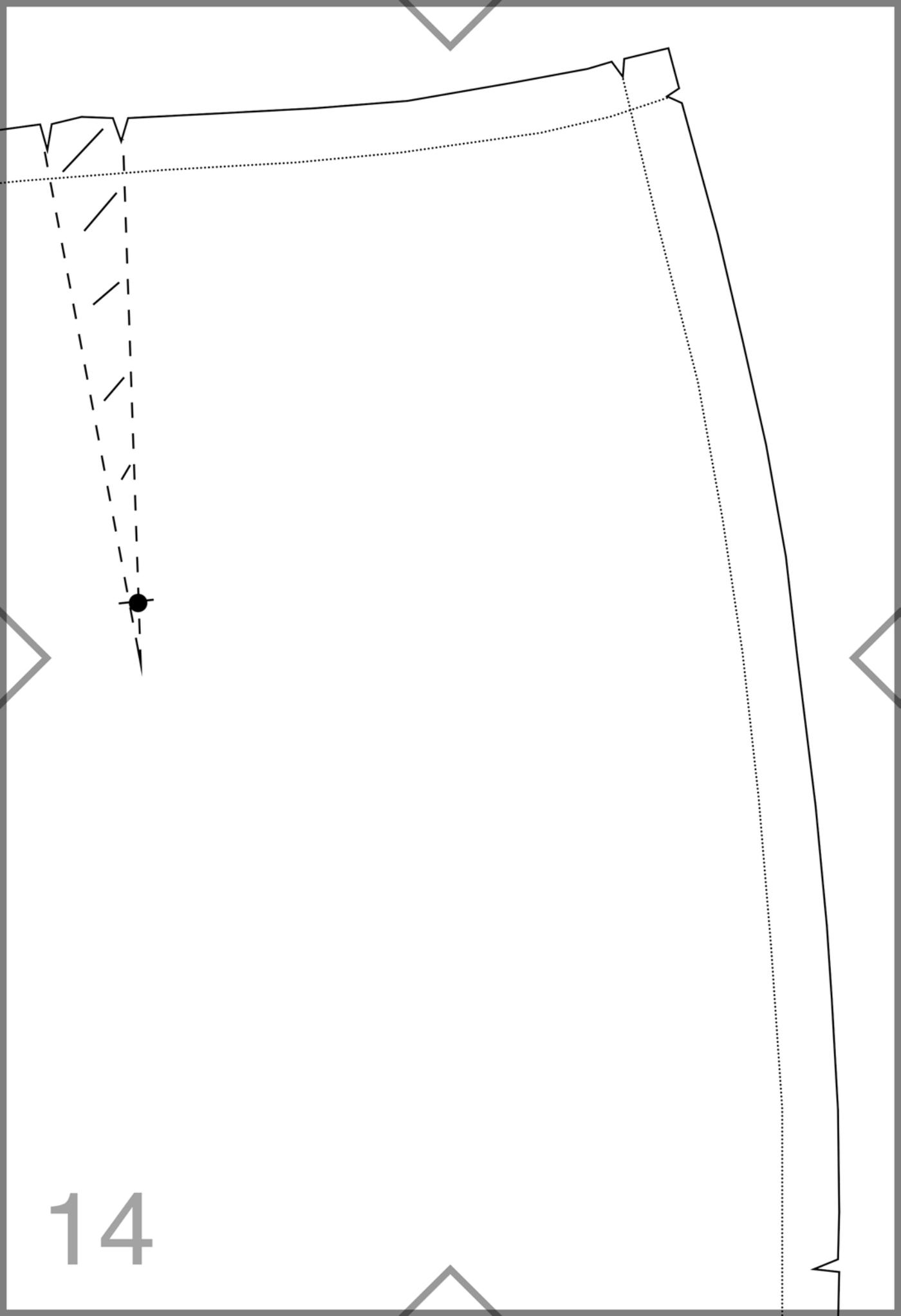
CUT 1 PAIR SELF
CUT 1 PAIR FUSE

CENTRE BACK

GRAIN LINE

CENTRE FRONT



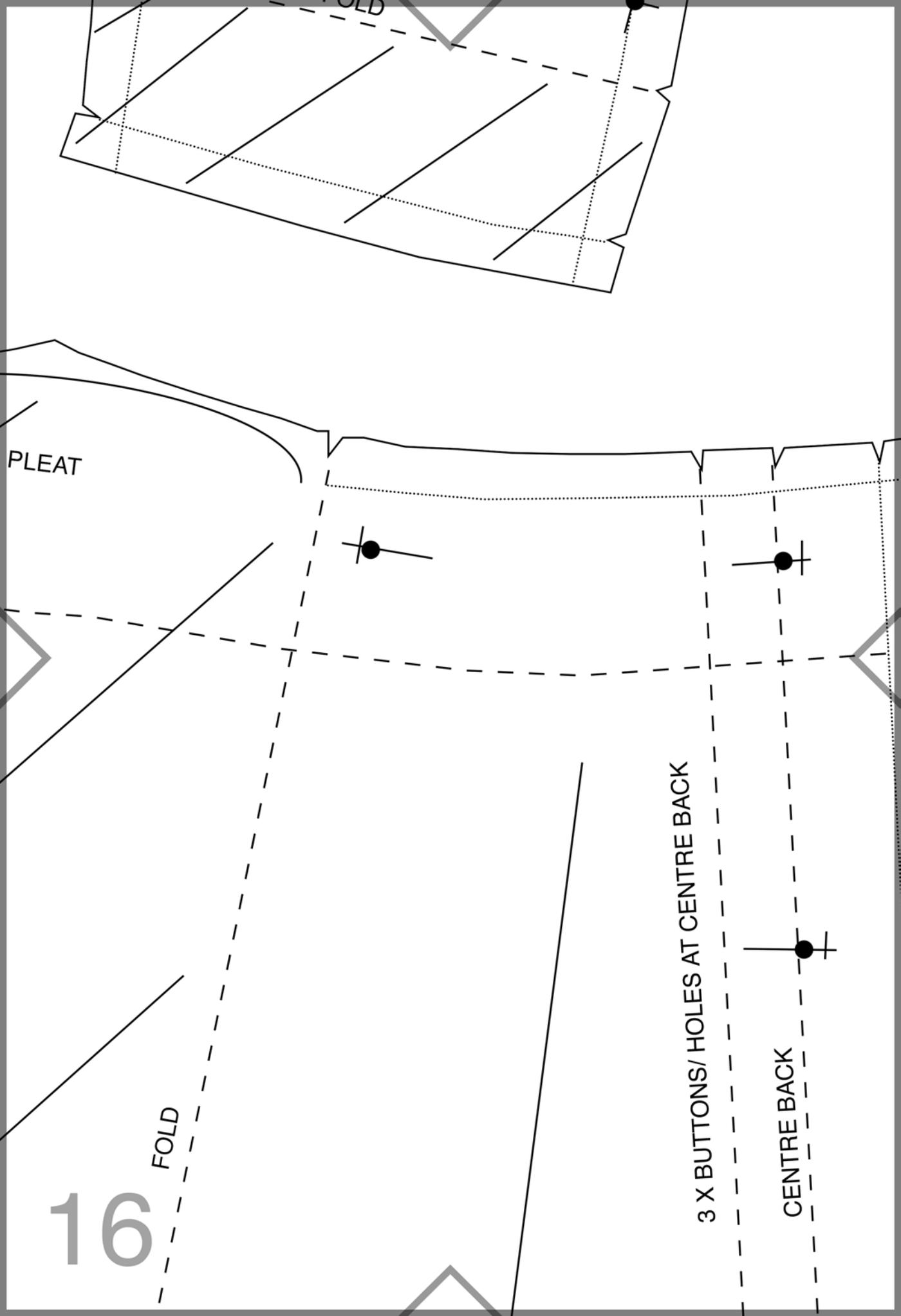


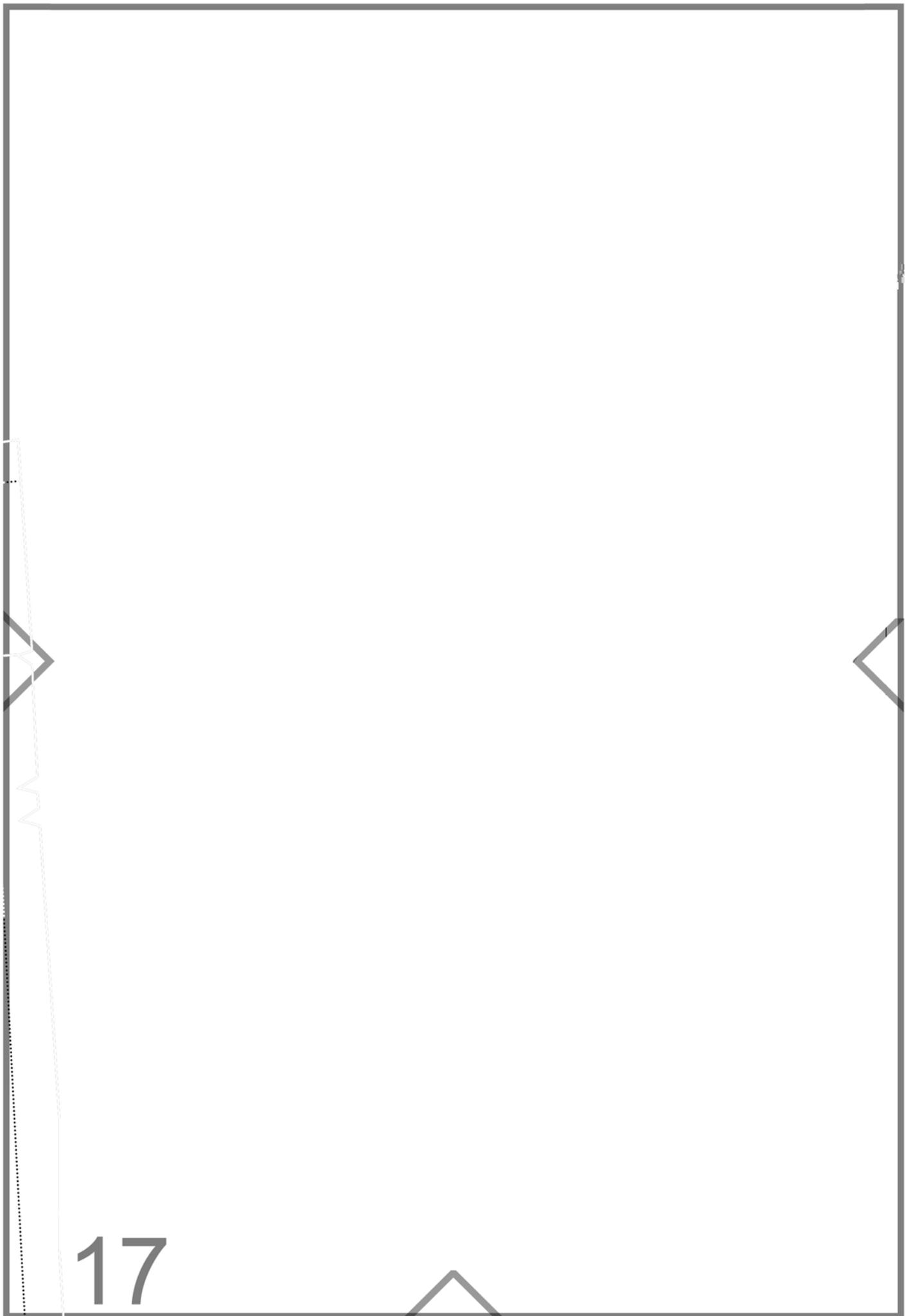
14

BAG OUT WITH FACING

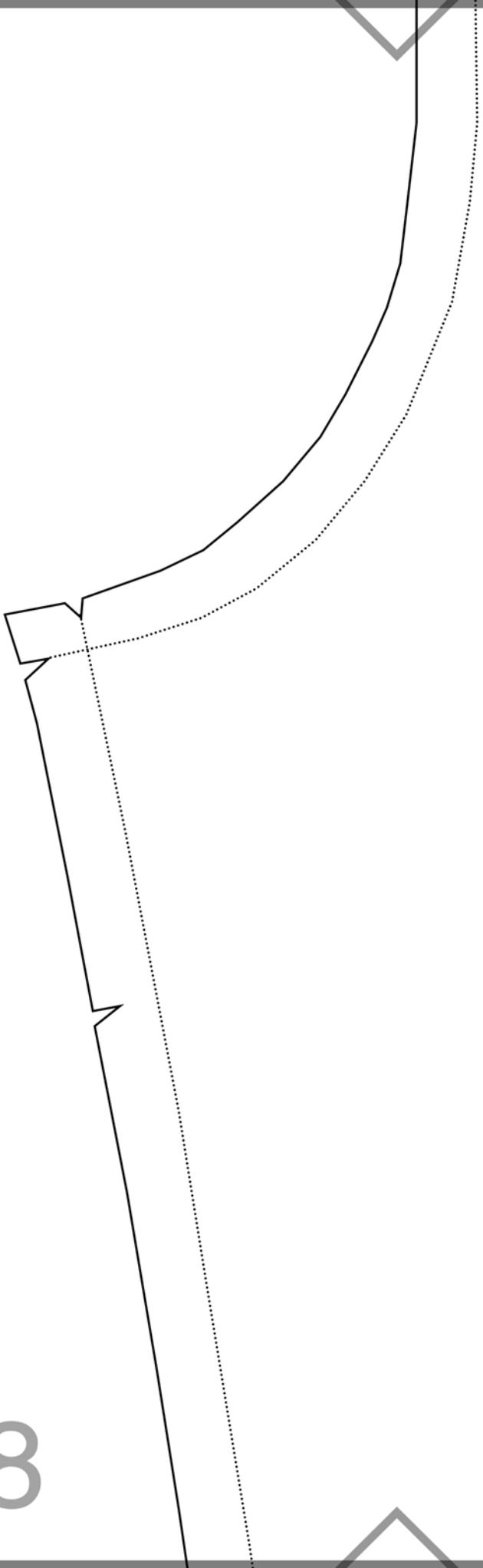
TOPSTITCH DOWN FACING

15





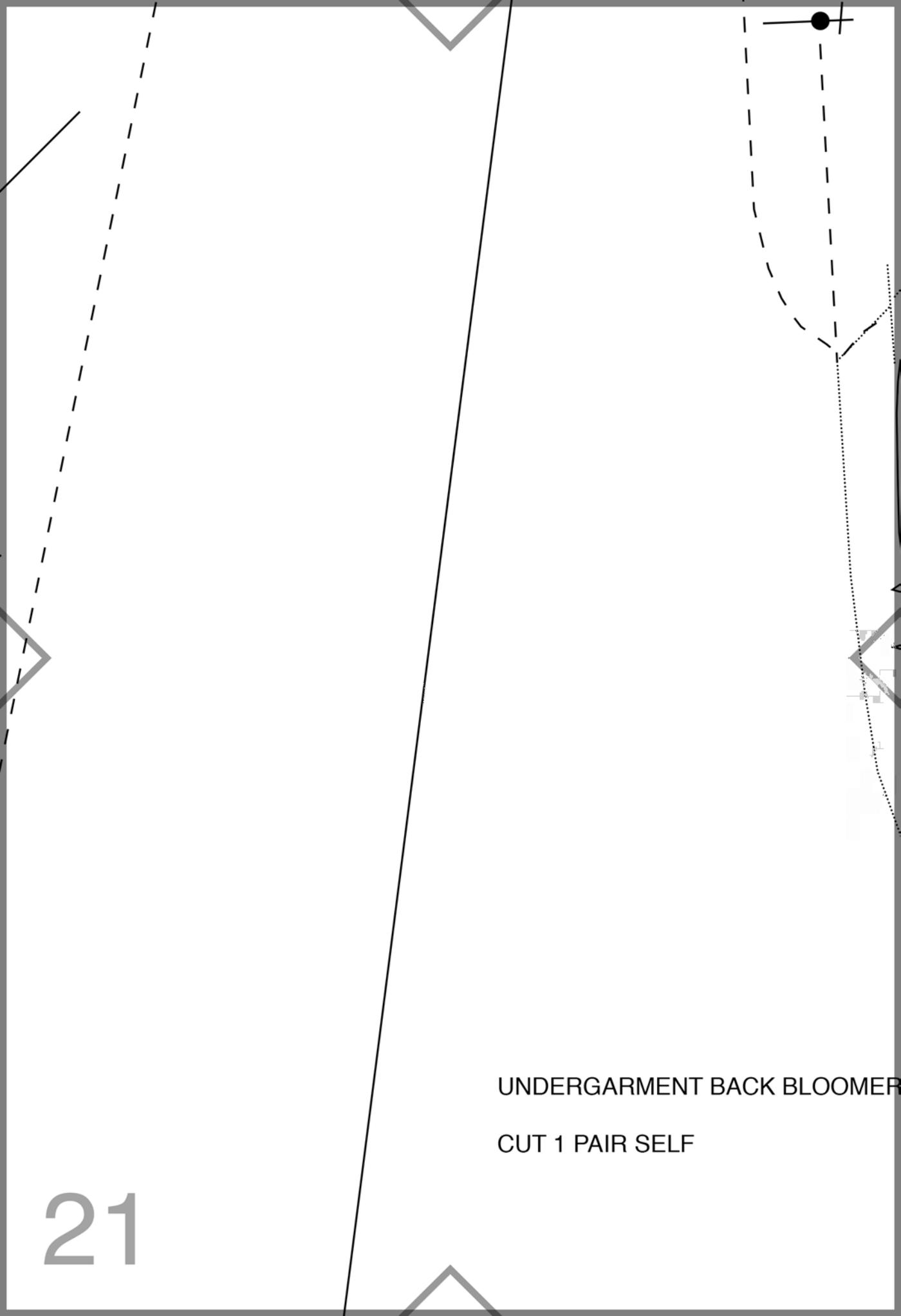
17



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UNDERGARMENT FRONT BLOOMER

CUT 1 PAIR SELF



UNDERGARMENT BACK BLOOMER

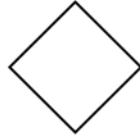
CUT 1 PAIR SELF

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CUT OR FOLD TO PRINT SAFE BOX

LINE UP SHAPES

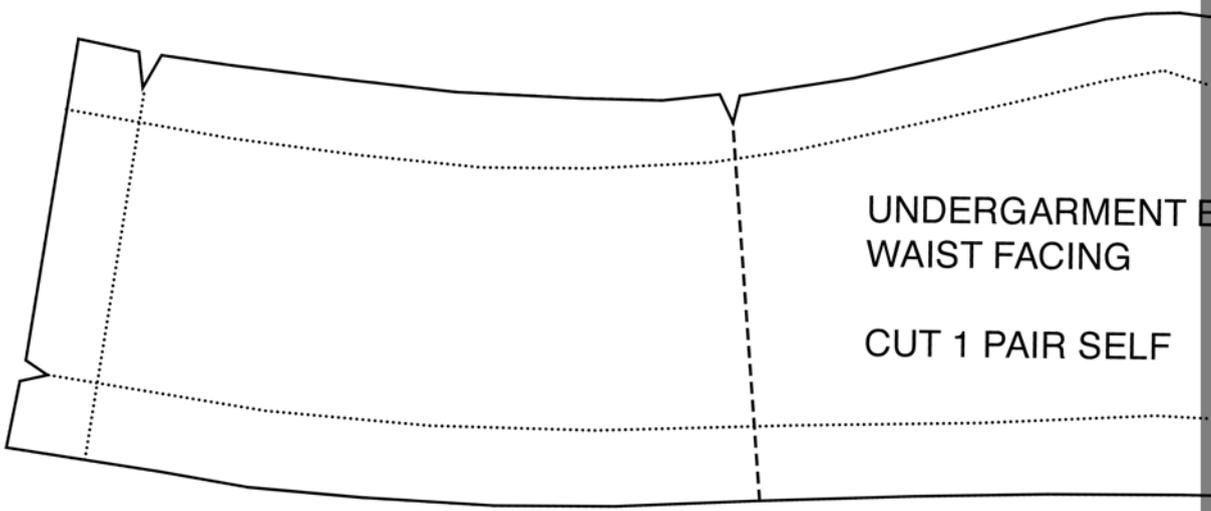
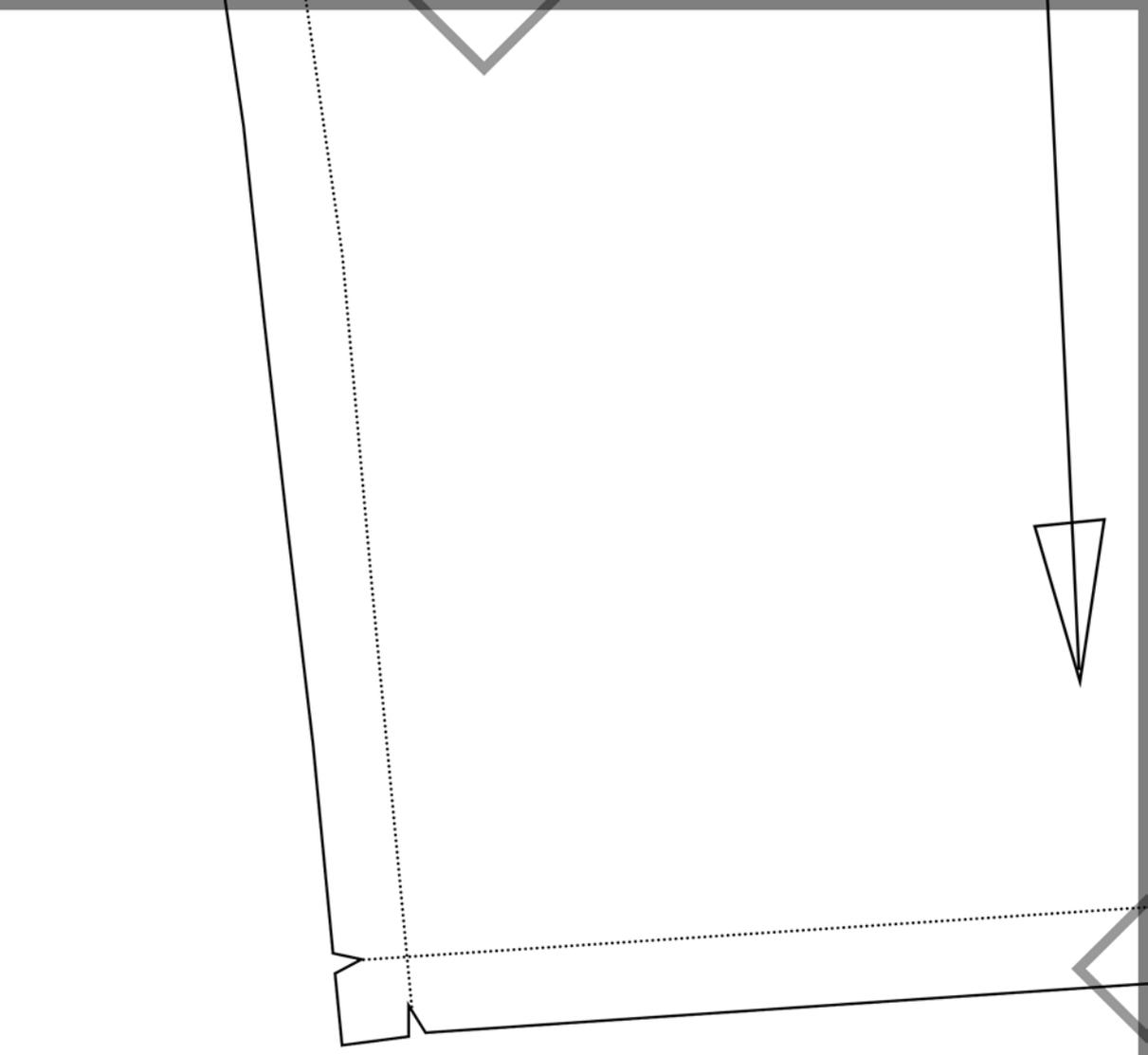
STICK TOGETHER



CUTTING LINE _____

SEAM ALLOWANCE

ASSEMBLE ACCORDING TO INSTRUCTIONS AND NOTES
ON PATTERN PIECES



GATHER INTO CUFF BAND

BACK BLOOMER

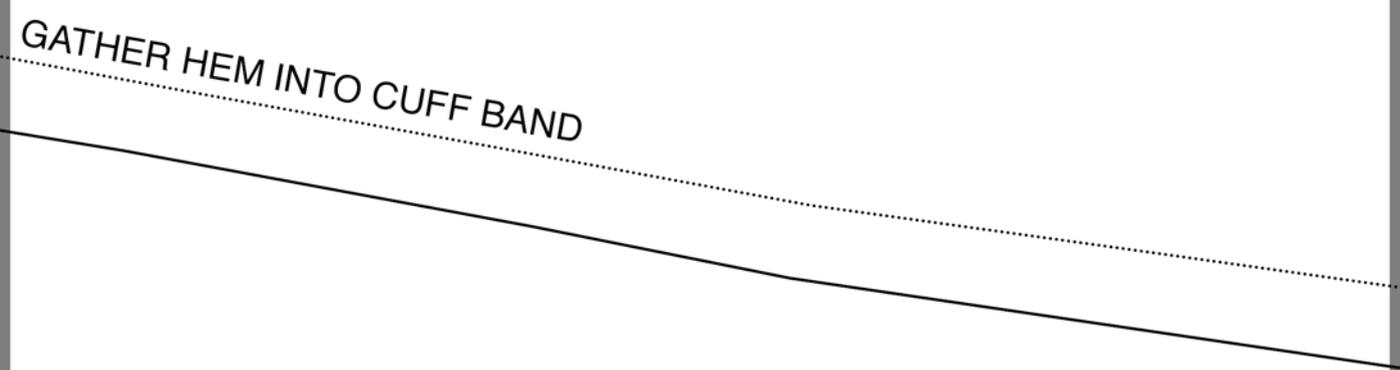


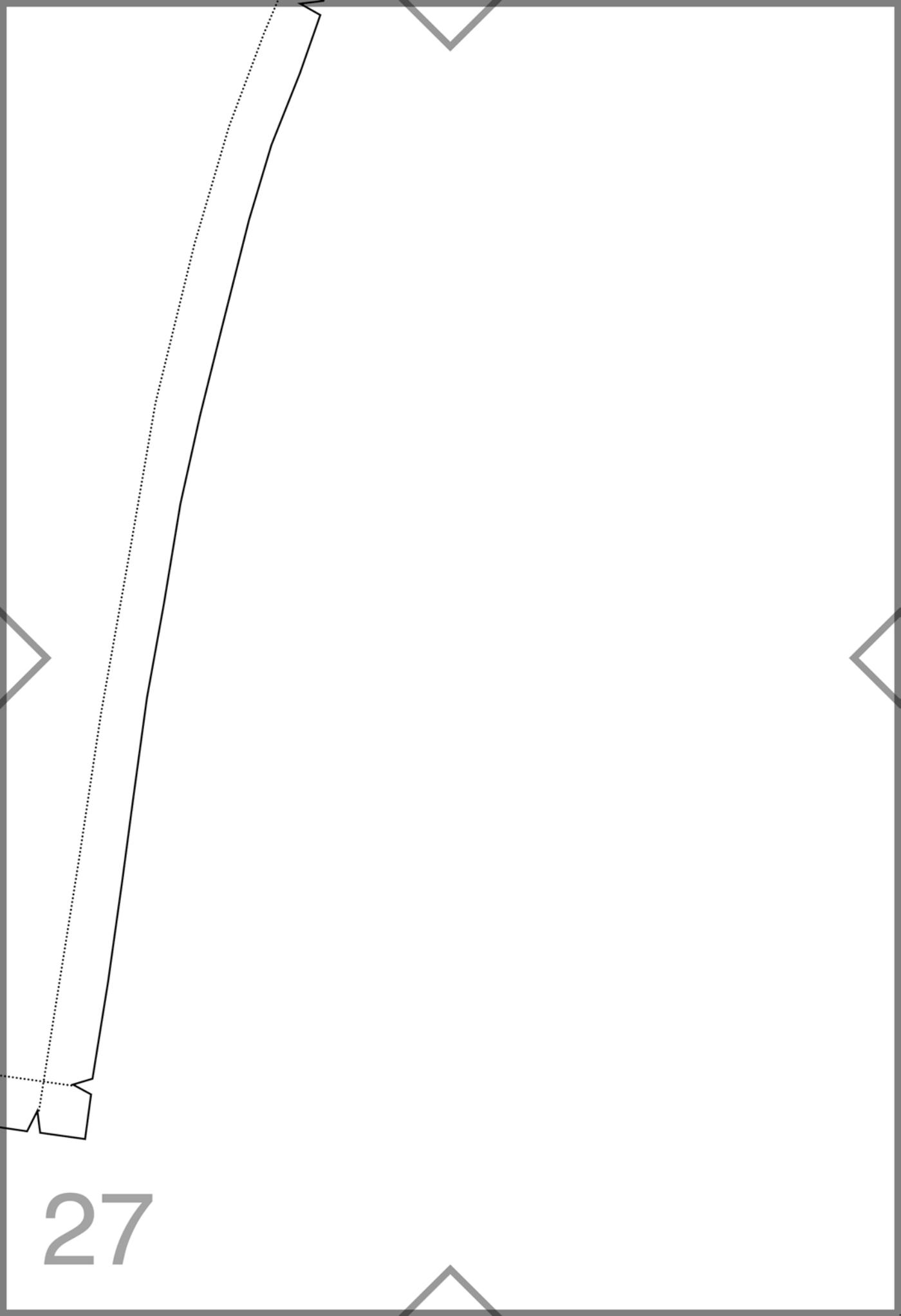
SIDE SEAM

GRAIN LINE

A diagram showing a grain line. A solid line starts at the top left and extends downwards and to the right. A downward-pointing arrow is drawn along this line, with the text "GRAIN LINE" written vertically above it.

GATHER HEM INTO CUFF BAND

A diagram showing a hem line. A solid line starts at the bottom left and extends towards the right, curving slightly upwards. A dotted line is drawn parallel to and above the solid line, indicating where to gather the hem into a cuff band.



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