

PATTERNS, SHAPES & GRADING

Kohl's Technical Design - Apparel
October 2018

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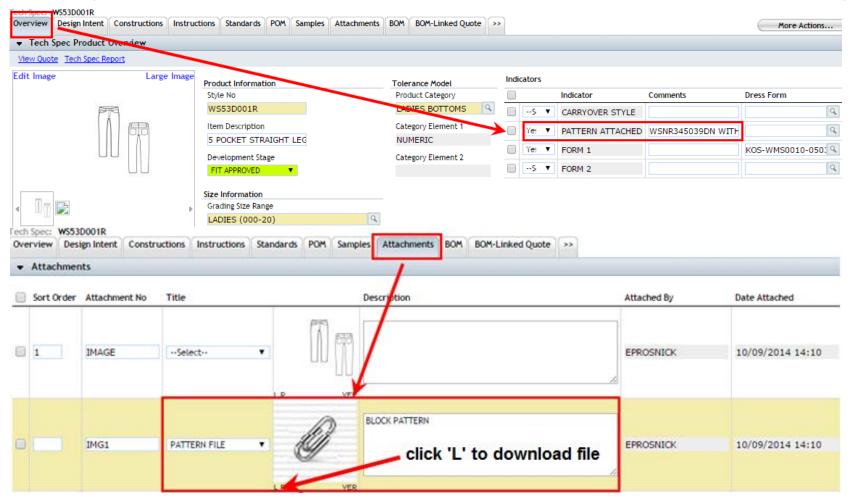
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		FIT	LIBBAE	VINDEY						
		FII	LIBRAR	RY INDEX						
		**USE DEVELOPN	MENT STAGE AS	"COSTING" FOR ALL	FILES					
Fit Libraries maybe updated after Benchmark. Use Fit Library in Development Season most relevant to current Style.										
NAME OF 1PLM FILE DESCRIPTION	STYLE NO	CUSTOMER	BUSINESS	TD Manager/ Contact Info	BRAND	GARMENT TYPE	SEASON	REQUEST#	LAST UPDATE	
FIT LIBRARY:MENS ACTIVE TOPS/BTMS/TG/FILA	FIT LIBRARY:MENS ACTIVE TOPS/BTMS	MENS	ACTIVE	Cherl.Andresek@kohls.com	TG/FILA	TOPS & BOTTOMS	SP18	00396863	UPDATED 6-6-17	
FIT LIBRARY: MENS BTMS/ALL BRANDS	FIT LIBRARY: MENS BTMS/ALL BRANDS	MENS	SPORTSWEAR	Cherl.Andresek@kohls.com	ALL	BOTTOMS	SP18	00396867	UPDATED 6-6-17	
FIT LIBRARY: MENS TOPS/ALL BRANDS	FIT LIBRARY: MENS TOPS/ALL BRANDS	MENS	SPORTSWEAR	Cherl.Andresek@kohls.com	ALL	TOPS	SP18	00396865	UPDATED 6-6-17	
FIT LIBRARY: YMTOPS/BTMS/ALL BRANDS	FIT LIBRARY: YMTOPS/BTMS/ALL BRANDS	YM	SPORTSWEAR	Cherl.Andresek@kohls.com	ALL	BOTTOMS	SP18	00370971	UPDATED 6-6-17	
FIT LIBRARY: BOYS 8-20 TOPS/BTMS/ALL BRANDS	FIT LIBRARY: BOYS 8-20 TOPS/BTMS	BOYS 8-20	SPORTSWEAR	Cherl.Andresek@kohis.com	ALL	TOPS	SP18	00370467	UPDATED 6-6-17	
FIT LIBRARY-GIRLS 0-7-TOPS-DRESSES-1 OF 4	FIT LIBRARY-GIRLS 0-7-1	GIRLS 0-7	SPORTSWEAR	Andrea Pease@kohis.com	ALL	TOPS & DRESSES	SP18	00420934	UPDATED 9-12-17	
FIT LIBRARY-GIRLS 0-7-BOTTOMS-2 OF 4	FIT LIBRARY-GIRLS 0-7-2	GIRLS 0-7	SPORTSWEAR	Andrea.Pease@kohis.com	ALL	BOTTOMS	SP18	00420933	UPDATED 9-12-17	
FIT LIBRARY-BOYS 0-7-BOTTOMS- 3 OF 4	FIT LIBRARY-BOYS 0-7-2	BOYS 0-7	SPORTSWEAR	Andrea.Pease@kohis.com	ALL	BOTTOMS	SP18	00420931	UPDATED 9-12-17	
FIT LIBRARY-BOYS 0-7-TOPS- 4 OF 4	FIT LIBRARY-BOYS 0-7-1	BOYS 0-7	SPORTSWEAR	Andrea.Pease@kohis.com	ALL	TOPS	SP18	00420927	UPDATED 9-12-17	
FIT LIBRARY-WMNS-APT.9	FIT LIBRARY-WMNS-APT.9	WOMENS	SPORTSWEAR	Michal.Sedivy@kohls.com	APT 9	ALL GARMENTS	SP18	00374166	UPDATED 6-7-17	
FIT LIBRARY-WMNS-SONOMA	FIT LIBRARY-WMNS-SONOMA	WOMENS	SPORTSWEAR	Michal.Sedivy@kohis.com	SONOMA	ALL GARMENTS	SP18	00380122	UPDATED 6-7-17	
FIT LIBRARY-WMNS-C&B	FIT LIBRARY-WMNS-C&B	WOMENS	SPORTSWEAR	Michal.Sedivy@kohis.com	C&B	ALL GARMENTS	SP18	00380123	UPDATED 6-7-17	
FIT LIBRARY-WMNS-PLUS-MILWAUKEE	FIT LIBRARY-WMNS-PLUS-MKE	WOMENS	SPORTSWEAR	Michal.Sedivy@kohis.com	ALL	ALL GARMENTS	SP18	00429874	CREATED -Available after 10/1	
FIT LIBRARY-WMNS-TEK GEAR	FIT LIBRARY-WMNS-TEK GEAR	WOMENS	ACTIVE	Jerllyn.Booth@kohls.com	TEK GEAR	TOPS & BOTTOMS	SP18	00431598	CREATED -Available after 10/1	
FIT LIBRARY-WMNS-SLEEPWEAR/CB	FIT LIBRARY-WMNS-SLEEPWEAR/CB	WOMENS	SLEEPWEAR	Jerlyn.Booth@kohls.com	C&B	TOPS & BOTTOMS	FA18	00440106	Ready to bid - Available after 9/13	
FIT LIBRARY-WMNS-SLEEPWEAR/SONOMA/APT 9	FIT LIBRARY-WMNS-SLEEPWEAR/SONOMA/APT 9	WOMENS	SLEEPWEAR	Jerlyn.Booth@kohls.com	SONOMA	TOPS & BOTTOMS	FA18	00445406	CREATED -Available after 10/1	
FIT LIBRARY-MATERNITY A:GLOW	FIT LIBRARY-MATERNITY A:GLOW	WOMENS	MATERNITY	Jerlyn.Booth@kohls.com	A:GLOW	ALL GARMENTS	SP18	00426643	CREATED 6-26-17	
FIT LIBRARY-JR-SPRTSWR-SO-TOPS-DRESS	FIT LIBRARY-JRS-1	JUNIORS	SPORTSWEAR	Lisa.Vetch@kohis.com	SO	TOPS & DRESSES	SP18	00439905	9/15/17	
FIT LIBRARY-JR-SPRTSWR-SO-BTTMS	FIT LIBRARY-JRS-2	JUNIORS	SPORTSWEAR	Llisa.Vetch@kohis.com	so	BOTTOMS	SP18	00433143	9/15/17	
FIT LIBRARY-JR-ACTIVE-SO-ALL GARMENTS	FIT LIBRARY-JRS-3	JUNIORS	ACTIVE	Llisa.Vetch@kohls.com	so	ALL GARMENTS	SP18	00442222	9/15/17	
FIT LIBRARY-JR-SPRTSWR-MUDD-TOPS-DRESS	FIT LIBRARY-JRS-4	JUNIORS	SPORTSWEAR	Llisa.Vetch@kohis.com	Mudd	TOPS & DRESSES	SP18	00442114	9/15/17	
FIT LIBRARY-JR-SPRTSWR-MUDD-BTTMS	FIT LIBRARY-JRS-5	JUNIORS	SPORTSWEAR	Llisa.Vetch@kohis.com	Mudd	BOTTOMS	SP18	00433175	9/15/17	
FIT LIBRARY-G 7-16-SPRTSWR-ALL-TOPS-DRESS	FIT LIBRARY-GIRLS 7-16-1	GIRLS 7-16	SPORTSWEAR	Llisa.Vetch@kohis.com	SO/Mudd	TOPS & DRESSES	SP18	00426992	7-31-17	
FIT LIBRARY-G 7-16-SPRTSWR-ALL-BTTMS	FIT LIBRARY-GIRLS 7-16-2	GIRLS 7-16	SPORTSWEAR	Llisa.Vetch@kohis.com	SO/Mudd	BOTTOMS	SP18	00433195	8-2-17	
FIT LIBRARY-G 7-16-ACTIVE-SO-TOPS & BTTMS	FIT LIBRARY-GIRLS 7-16-3	GIRLS 7-16	ACTIVE	Lilsa.Vetch@kohis.com	SO	TOPS & BOTTOMS	SP18	00431747	7-31-17	
FIT LIBRARY-G 7-16-SLEEP-SO-ALL GARMENTS	FIT LIBRARY-GIRLS 7-16-4	GIRLS 7-16	SLEEPWEAR	Llisa.Vetch@kohis.com	so	ALL GARMENTS	SP18	00432662	7-31-17	
FIT LIBRARY-G 7-16-OUTERWEAR-SO-JACKETS	FIT LIBRARY-GIRLS 7-16-5	GIRLS 7-16	OUTERWEAR	Llisa.Vetch@kohls.com	so	ALL GARMENTS	SP18	00429582	7-31-17	
FIT LIBRARY-WMNS-ELLE	FIT LIBRARY-WMNS-ELLE	WOMENS	SPORTWEAR	mainuong.ton@kohis.com	ELLE	ALL GARMENTS	SP18	432425	7-31-17	
FIT LIBRARY-WMNS-LC	FIT LIBRARY-WMNS-LC	WOMENS	SPORTWEAR	mainuong.ton@kohis.com	LC	ALL GARMENTS	SP18	432151	7-26-17	
FIT LIBRARY-WMNS-R&R	FIT LIBRARY-WMNS-R&R	WOMENS	SPORTWEAR	mainuong.ton@kohis.com	R&R/R&R PLUS	ALL GARMENTS	SP18	428518	7-11-17	
FIT LIBRARY-JR-CANDIES	FIT LIBRARY-JR-CANDIES	WOMENS	SPORTWEAR	mainuong.ton@kohis.com	CANDIES/CANDIES PLUS	ALL GARMENTS	SP18	429783	8-21-17	
FIT LIBRARY-WMNS-DANA BUCHMAN	FIT LIBRARY-WMNS-DANA BUCHMAN	WOMENS	SPORTWEAR	elena.shuster@kohls.com	DANA regular and plus	ALL GARMENTS	SP18	428067	7-6-17	
FIT LIBRARY-WMNS-FILA	FIT LIBRARY-WMNS-FILA	WOMENS	ACTIVE	elena.shuster@kohis.com	FILA regular and plus	ALL GARMENTS	SP18	435068	8-8-17	
FIT LIBRARY-WMNS-JLO	FIT LIBRARY-WMNS-JLO	WOMENS	SPORTWEAR	elena.shuster@kohis.com	JLO regular and plus	ALL GARMENTS	SP18	430736	8-25-17	
FIT LIBRARY-WMNS-SVVW	FIT LIBRARY-WMNS-SVVW	WOMENS	SPORTWEAR	eiena.shuster@kohis.com	SVVW regular and plus	ALL GARMENTS	SP18	431323	7-21-17	

The Block patterns are available in onePLM. Fit Library has been created for Kohl's Private and Exclusive brands by the Kohl's TDs. The block patterns are in the Fit Library with any landmarks by brand. There is a chart on K-Link under Private & Exclusive Brands. You must search through Tech Spec not Request for Quote.



Kohl's TD will add if a reference pattern is to be used in the indicator field of the overview. Kohl's TD will copy attachment page with PR Pattern for any carryover or repeat styles. You need to make sure this is used unless otherwise specified by KTD





How to train Sample Room and MRs?

- Make sure the MR and Sample Room understands how to use the correct pattern for start point.
 - Provide them with file "How to Use Fit Library for MRs". The tool is available on K-link.
 - Review the previous slide with sample room on how to pull reference Pattern from the system.
 - Ask the Patternmaker to overlay new pattern on block or reference pattern to ensure integrity of the block or reference is maintained for your review.



Fit Library Index

Is there more than one Fit Library?

YES, in some cases, there are multiple due to the large variety of product categories.

To find the Style No. or Reference No.

Go to: K-Link https://link.kohls.com

Navigate to: Resources, Private and Exclusive Brands, Global Technical Design, Apparel Resource Tools

Find: Fit Library Index

Print the complete list of available Libraries







What is a Block?

Block Pattern – no seam allowance, no shrinkage, follows spec measurement. Use as sloper for developing other styles. Block does not include manufacturing loss. Each factory could be set up differently with different equipment so manufacturing loss differs.



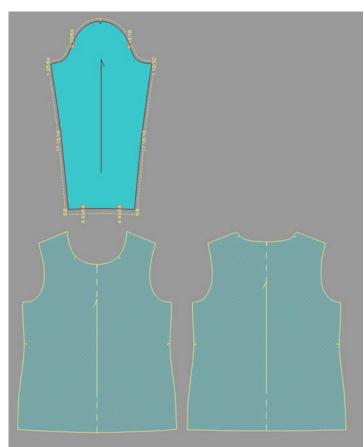
How to use a Block?

- Apply the style line from the design intent page.
- Add your seam allowance
- Add your manufacturing loss.
 - A Vendor should know if their average loss at each stage of the manufacturing. (cutting, sewing pressing, etc)
- Add your shrinkage if garment washed.



What is a Reference Pattern?

Reference Pattern – May have seam allowance, shrinkage, sewing allowance, styling details, manufacturing loss or gain, use for referencing shapes or style lines. Reference pattern is often a previous approved style.



How to use a Reference Pattern?

- Verify Patternmaker is able to successfully import into CAD system
- Patternmaker should check that 10"X10"Square still measures 10"X10"
- Review pattern measurement vs. POM spec and note differences due to shrinkage, sewing, styling details for new style.
- After creating new pattern from reference pattern, overlay new pattern over reference to confirm shapes/proportions have been maintained per reference pattern.
- If patternmaker has concerns following reference pattern shape & meeting requested specs, ask TD for clarification or make 2nd fit sample option with patternmaker's recommendation.







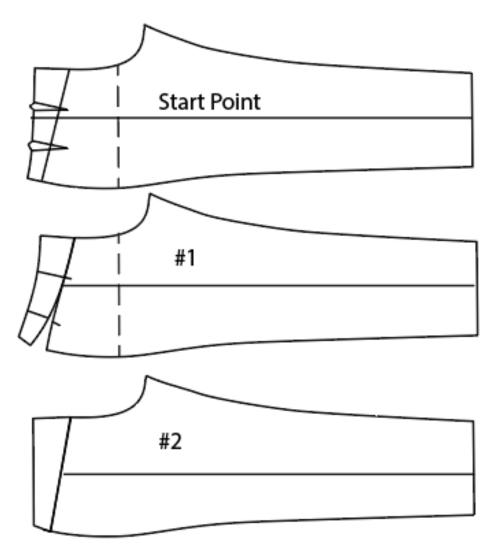
Overlay New pattern on Original Block or Reference



- ☐ Purple is OriginalPattern
- □ Gray is Revised with pattern change request
- This is the best way to present your problem or questions. It helps Kohl's TD see has happened to the pattern.



How to use a Block or Reference Pattern



Darts can not removed from a garment without accounting for them somewhere else in the garment.

#1 Shows a yoke added and the dart action now placed between body and yoke.

#2 Shows the dart action placed at top between yoke and waistband.



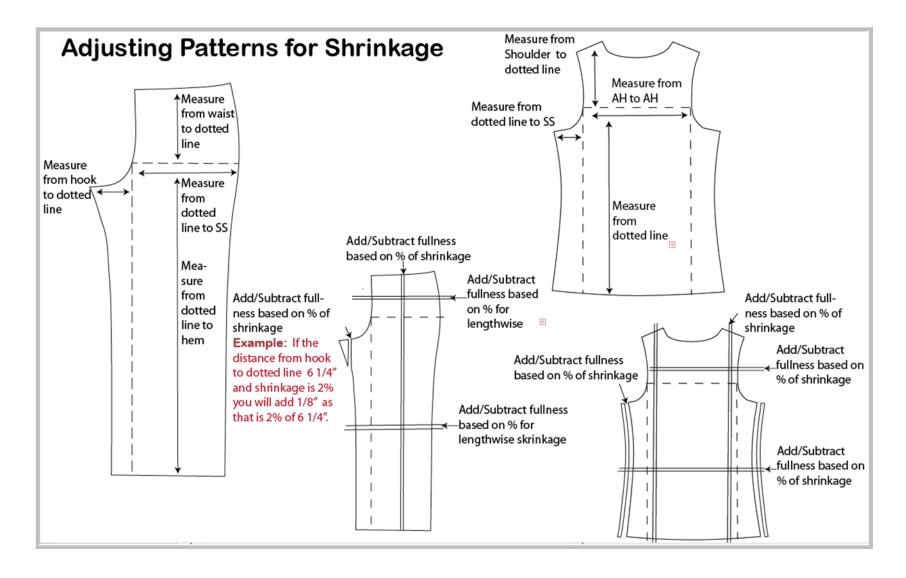
- What is the difference between Shrinkage and Manufacturing Loss or Gain?
 - Shrinkage is what happens to the fabric in length and width when washed.
 - Manufacturing loss or gain is what happens in each aspect of production from spreading, cutting, fusing, sewing to pressing.
- Should sample pattern be reviewed with or without shrinkage?
 - Reviewing pattern with the shrinkage included may be helpful to understand if shapes were properly maintained when shrinkage was applied to pattern.
 - Shrinkage should be add before the manufacturing loss
 - Patterns sent for block pattern development should not have shrinkage or manufacturing loss included
 - Manufacturing Loss or Gain
 - Manufacturing loss or gain is average lose or gain in a garment or cut work when handled by properly training individual or properly maintained equipment
 - Guidelines of should be set for each stage of manufacturing. Each stage should be factored in to the pattern.
 - Does the cutter cut on inside or outside of marker line.
 - How much is allowed for trim at sewing operation with knife
 - How much stretch is acceptable when felling a rise of a pant
 - How much did I lose when I fused the waistband

EACH STAGE OF MANUFACTURING(Spreading, Cutting, Pre-operation, Sewing, Finishing) SHOULD BE ASSESSED AND APPLIED TO PATTERN TO ACHIEVE CONSISTENT RESULTS IN MANUFACTURING

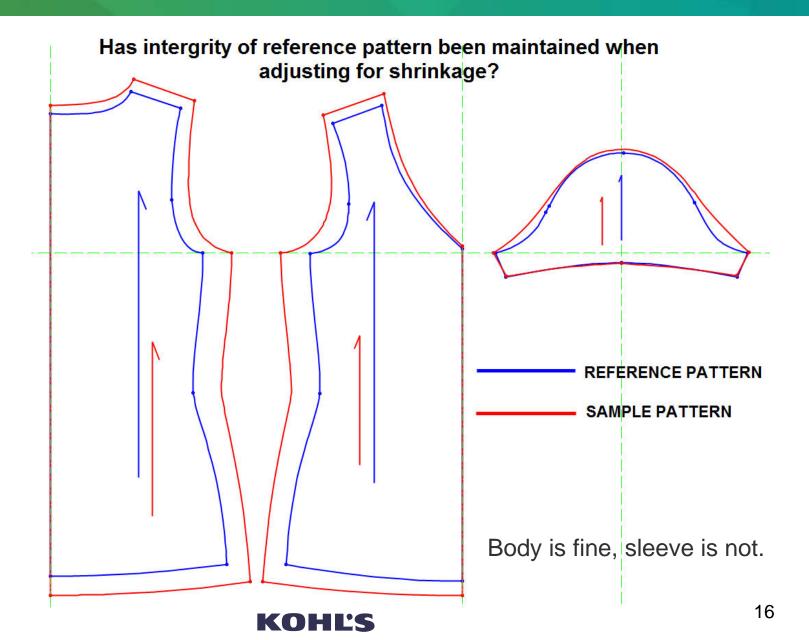
CTD should advise the Kohl's Technical Designer why pattern varies from spec to better inform the KTD how much has been added for shrinkage and sewing loss.



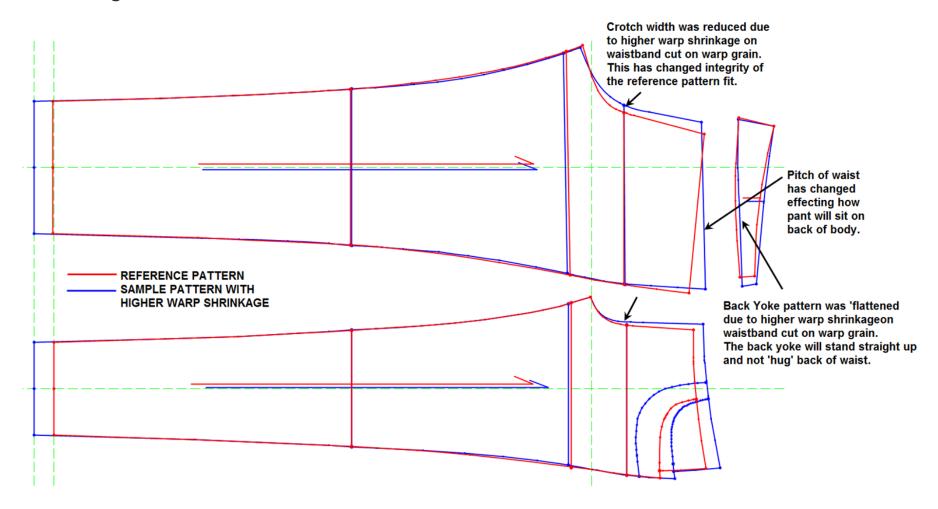






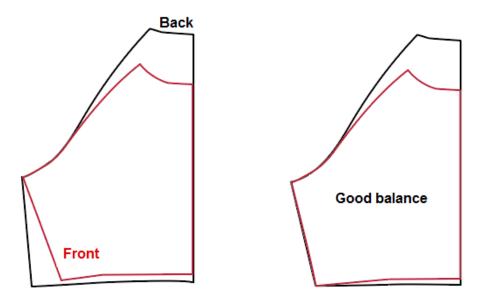


Has integrity of reference pattern been maintained when adjusting for shrinkage?



What is good balance?

Balance: occurs when the pattern is in equilibrium. The right and left side of the pattern appear evenly balanced or symmetrical. Balance relates to grain and line in the garment. A garment is out of balance when it is cut off grain, causing it to hang unevenly. Also if the line of the garment does not follow the line of the body, it will hang out of balance. Poor posture or lack of symmetry in the wearer's body is another likely cause of it.





Guide for Checking Tops



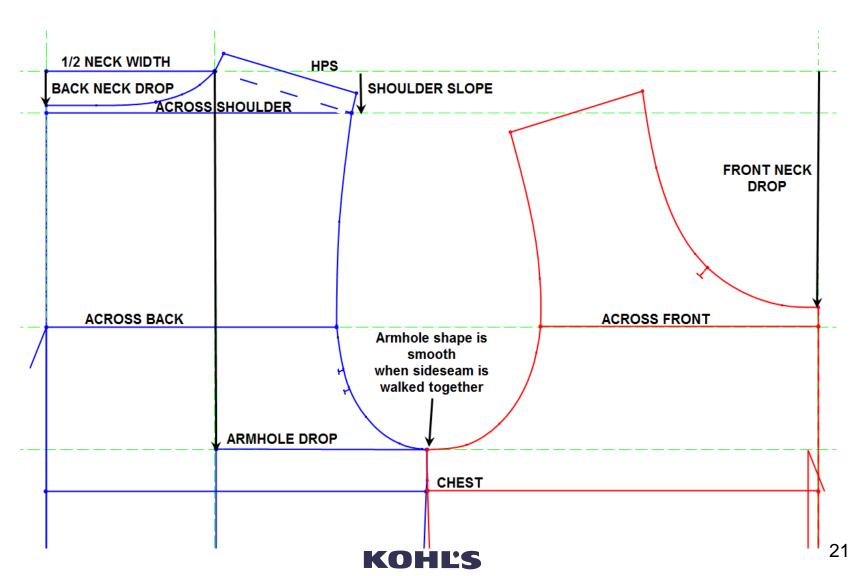
Center Front should be perpendicular to Floor and Chest Line should be parallel to Floor. Center of sleeve should be in centered with Arm

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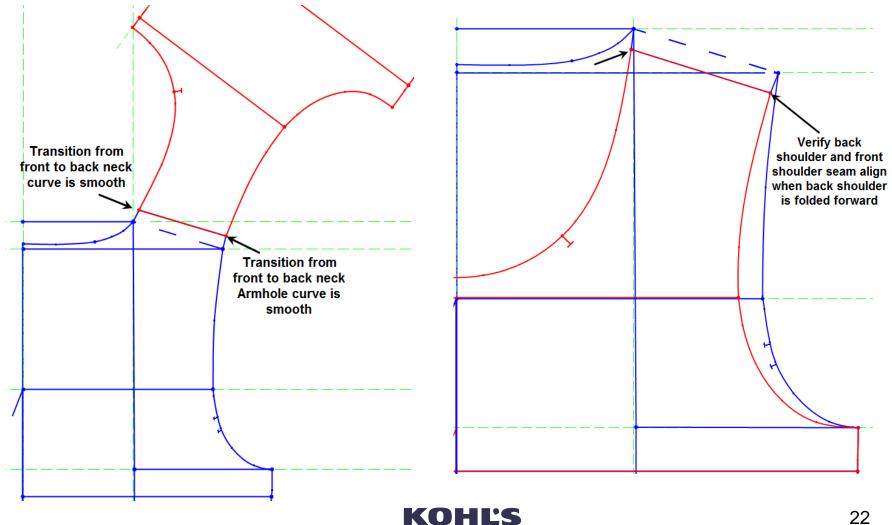
Center Back should be perpendicular to Floor and Chest Line should be parallel to Floor.



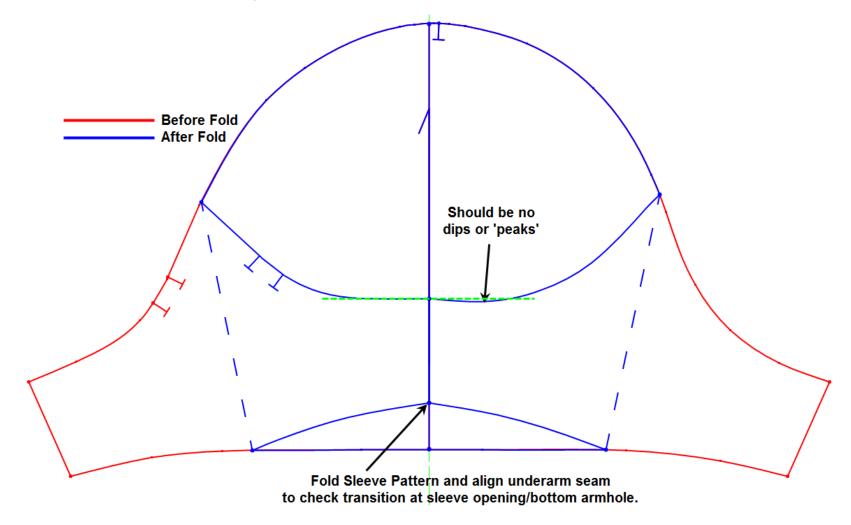
Guide for Checking Pattern-Tops



Guide for Checking Pattern-Tops



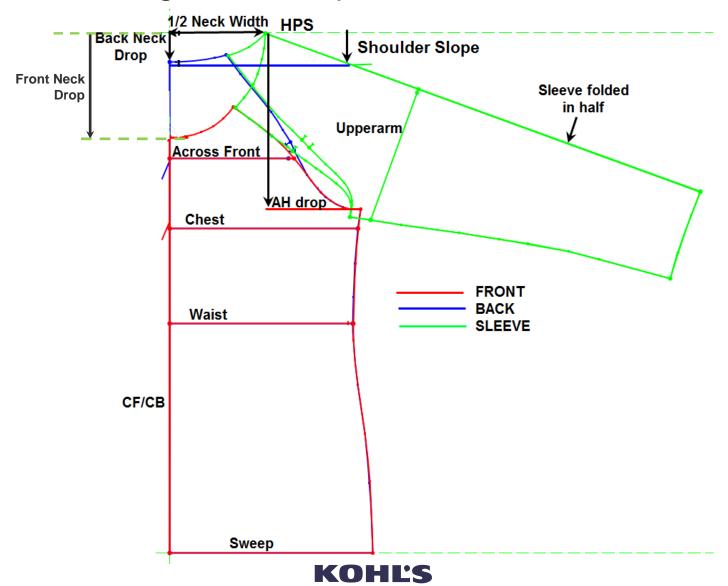
Guide for Checking Pattern- Sleeve



This sleeve may not fit well due to 'peak'/pull up at underarm seam.

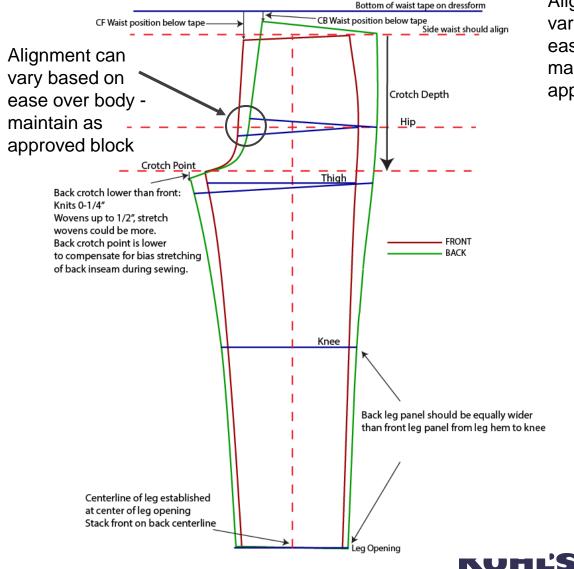


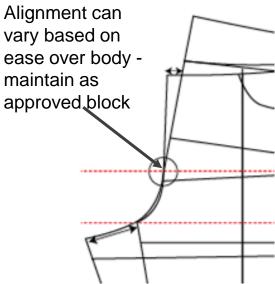
Guide for Checking Pattern-Tops



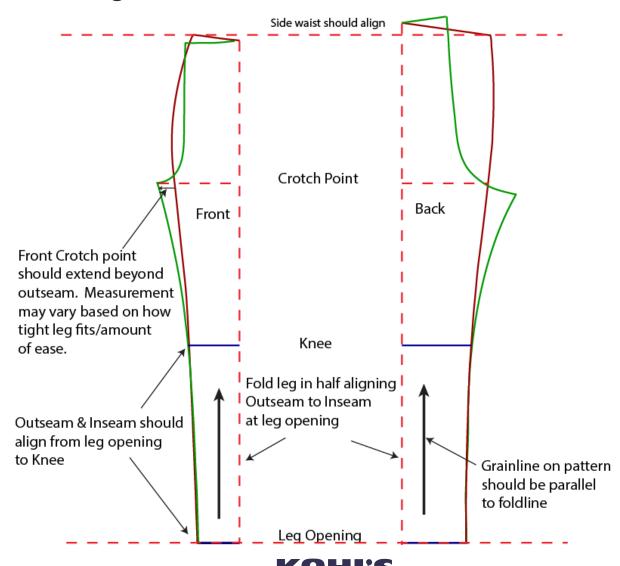
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Guide for Checking Pattern-Pant

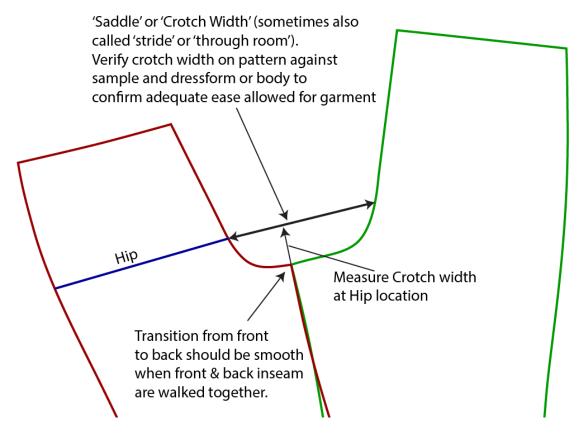




Guide for Checking Pattern-Pant



Guide for Checking Pattern-Pant





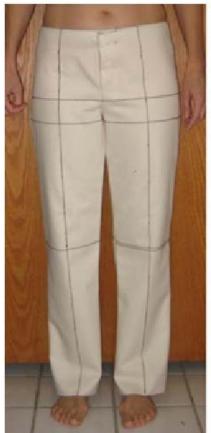
Saddle is unbalanced and off from the center





Guide for Checking Pattern-Pant

When you have a perfectly balanced pant, the horizontal reference lines on pattern should hang parallel to floor & vertical reference lines on pattern perpendicular to floor.



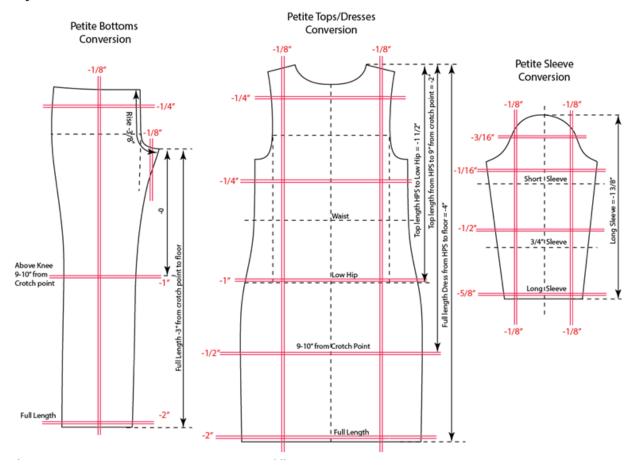


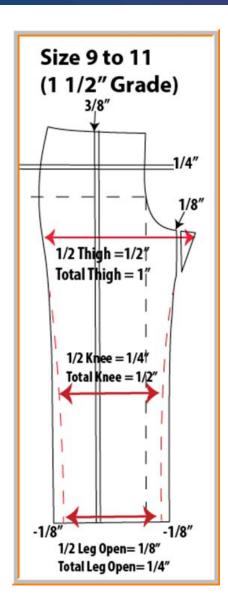




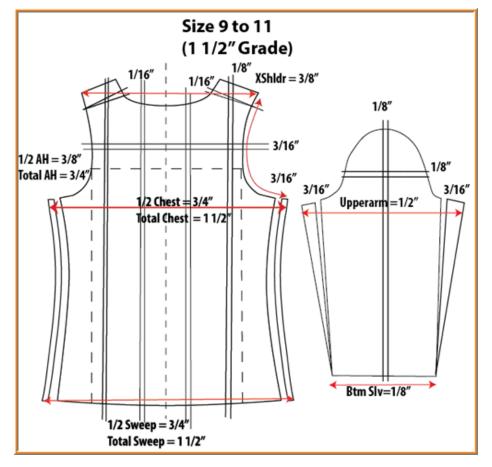
Conversion

When converting for special sizes from a regular style it is key that the integrity of the regular style is maintained.

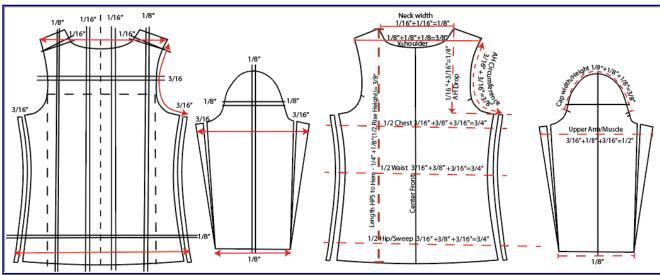




Note: You will grade exact so will be using 16th and 32nd. The grade table for simplicity is rounded to the nearest 1/8"



How to use the grade schematics?



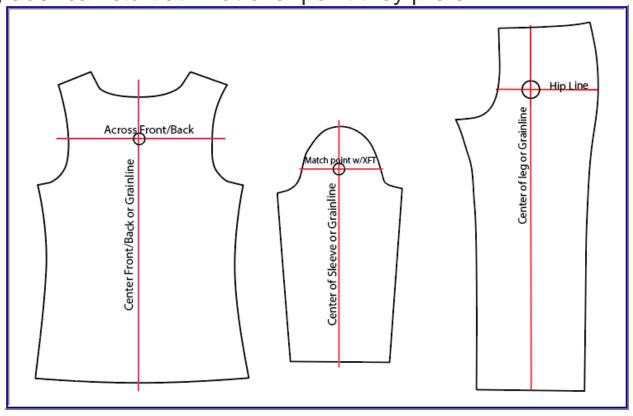
KOHLS	JUNIORS(0000-19)(14P-30P)	_								
Description	Model Type	1 1/2" Grade								
JUNIORS(0000-	Grading Model		1.				-			
19)(14P-30P)			9 to 11					General guideline		
Number Format	Grading Method	4								
Fraction	Cumulative									Non Children Styles - Growth is affects
Code	Alt Description	Size Code	7	[9]	11	13	15	17	19	
A100	NK WIDTH@SEAM/EDGE	Grade	-1/8	0	1/8	1/4	3/8	1/2	5/8	
A110	FRT NK DROP@SEAM/EDGE	Grade	0	0	0	1/8	1/8	1/4	1/4	1/2 of the Neck Width
A250	ACROSS SHOULDER	Grade	-1/4	0	3/8	3/4	1	1 1/4	1 1/2	Grade is usually 1/2 of the body for Reg but taper off for Larger sizes
A254	ACROSS FRONT	Grade	-1/4	0	3/8	3/4	1 1/8	1 3/8	15/8	Grades same as Xshoulder for Reg
A255	ACROSS BACK	Grade	-1/4	0	3/8	3/4	1 1/8	1 3/8	15/8	Grades same as Xshoulder for Reg
A260H	CHEST 1" BLW AH RLXD-1/2 MEAS	Grade	-1/2	0	3/4	1 1/2	2 1/4	3	3 3/4	1/2 of Body Circumference
A270H	WAIST RLXD-TOPS-1/2 MEAS	Grade	-1/2	0	3/4	1 1/2	2 1/4	3	3 3/4	1/2 of Body Circumference
A283H	HIP-TOPS-1/2 MEAS	Grade	-1/2	0	3/4	1 1/2	21/4	3	3 3/4	1/2 of Body Circumference
A300	LEN HPS TO HEM	Grade	-3/8	0	3/8	3/4	1 1/8	1 1/2	1 7/8	Armhole Drop + 1/2 Rise Drop
A330	ARMHOLE DROP-FROM HPS	Grade	-1/4	0	1/4	1/2	3/4	7/8	1 1/8	Front neck drop + Cap
A340H	UA/MUSCLE 1" BLW AH-1/2 MEAS	Grade	-1/8	0	1/4	1/2	3/4	1	1 1/4	Cap width + Saddle
A352H-4W	SLV OPENING RLXD-1/2 MEAS. L/SLV	Grade	0	0	1/8	1/8	1/4	1/4	3/8	
A360-4W	SLV LEN FROM CB NK-L/SLV	Grade	-1/4	0	1/4	5/8	7/8	1 1/8	1 3/8	1/2 Across Shoulder + Cap Height
A400H	*WAIST@TOP EDGE-RLXD 1/2 MEAS	Grade	-1/2	0	3/4	1 1/2	2 1/4	3	3 3/4	1/2 of Body Circumference
A412H	LOW HIP #" FM TOP EDGE-1/2 MEAS	Grade	-1/2	0	3/4	1 1/2	2 1/4	3	3 3/4	1/2 of Body Circumference
A425H	THIGH@1" BLW CROTCH PT-1/2 MEAS	Grade	-3/8	0	1/2	1	1 1/2	1 7/8	2 1/4	1/4 of front + Saddle Grade
A438H-08P	LEG OPENING RLXD-FULL LENGTH 1/2 MEAS	Grade	-1/8	0	1/8	1/4	3/8	1/2	5/8	
A450	*FRT RISE TO WB SEAM/TOP EDGE	Grade	-1/4	0	3/8	3/4	1 1/8	1 1/2	1 3/4	Rise Drop + Saddle width
A460	BK RISE TO WB SEAM/TOP EDGE	Grade	-1/4	0	3/8	3/4	1 1/8	1 1/2	13/4	Rise Drop + Saddle width



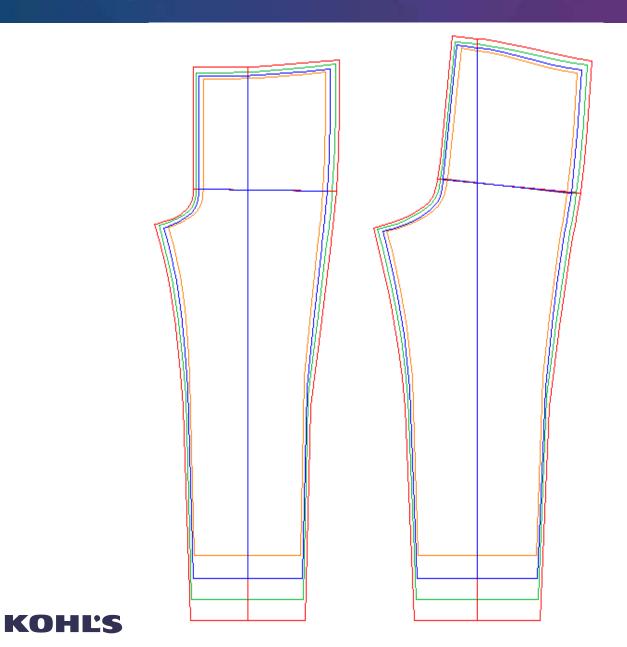
Stacking of graded nest for Kohl's

Nest sent to Kohl's should be stacked with the stack point for tops being the across front or across back and center front or center back for tops. Sleeve should be across front Match point and center of the sleeve. Pant should be nested at center of leg and hip line. Kohl's TD has the option to request a different stack point.

NOTE: The grader can start at what ever point they prefer.



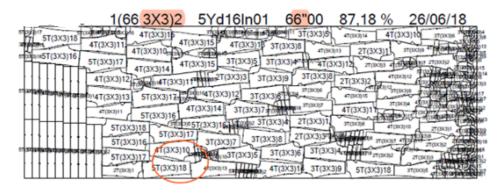




Grading & Markers

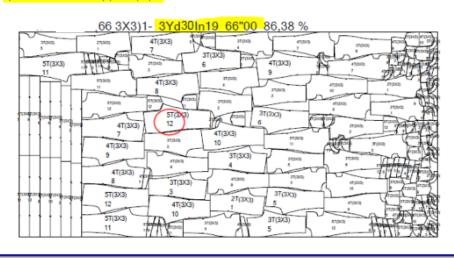
When showing a cost increase we need to see like markers for before and after. If your original marker for cost had 18 pieces, the new marker should 18 pieces. We need to see the orientation of the pieces so we can clearly see how the marker has changed by any fit changes. Any additional suggestion you recommend is welcome along with our request.

Original mini marker



3:6:6:3 18pcs

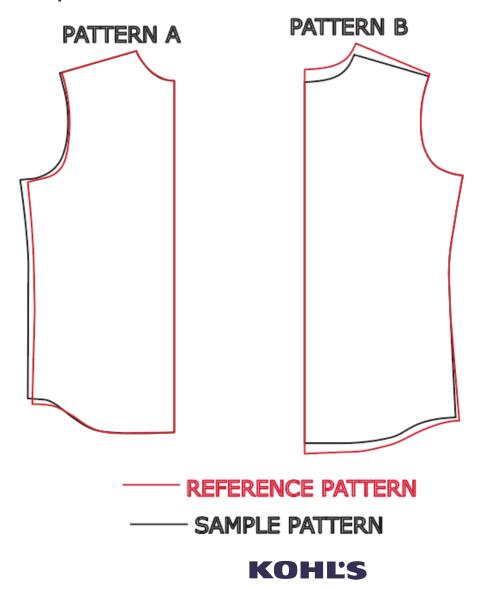
updated mini marker w/ pull- up spec



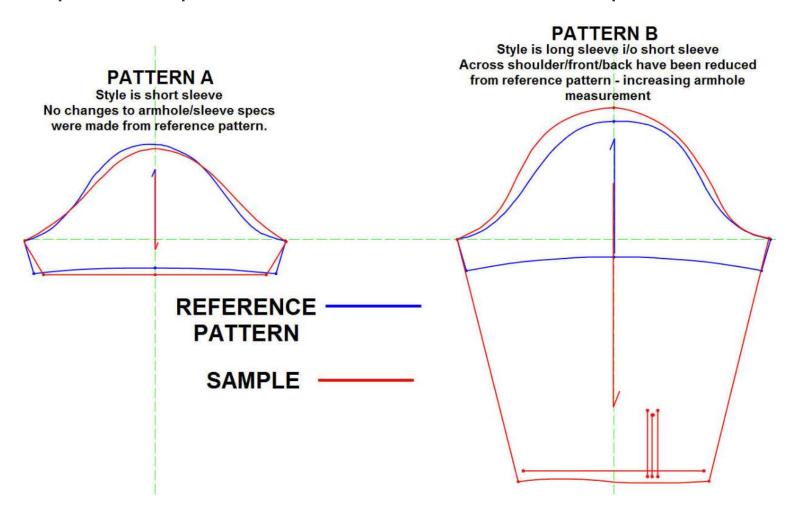
* 2:4:4:2(12PCS) * BDY - 2WAY

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Which pattern represents correct use of reference pattern?

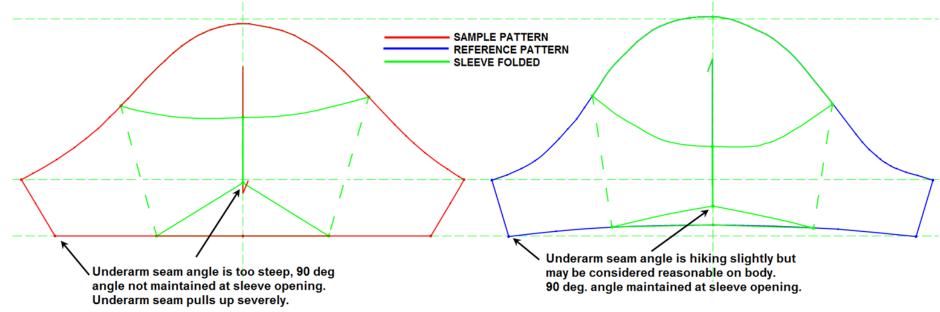


Which pattern represents correct use of reference pattern?



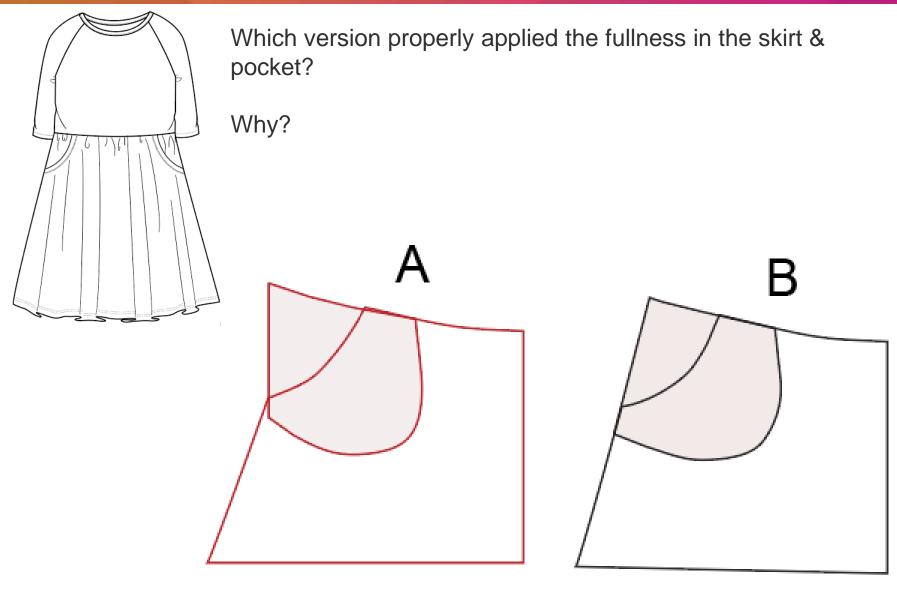
'Pattern A' does not follow Reference shape



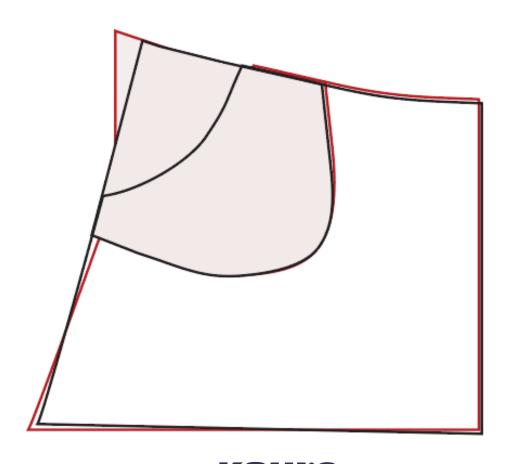


Pattern B is correct. Some changes made for adjustments to AH shape on body, but overall proportion and shape of sleeve cap as well as angle of underarm have been maintained



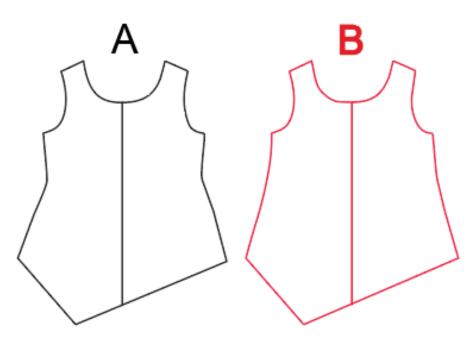


'Pattern A' alter the integrity of the pattern. The fullness can not be split into pocket only. It needs to be split through the skirt and maintain shape on the side seam.



Which pattern correctly represents pattern for garment at right?

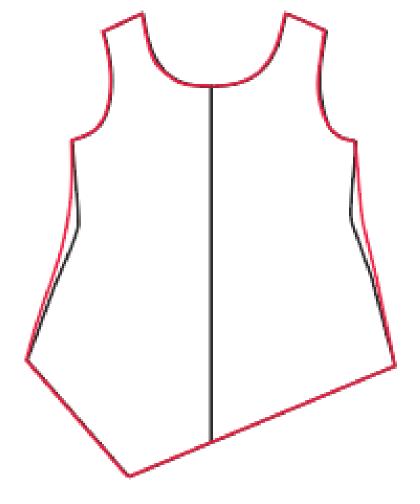
Why?





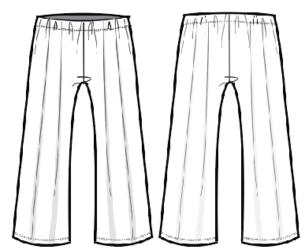
'Pattern A' has too much shape at waist and very sharp line to

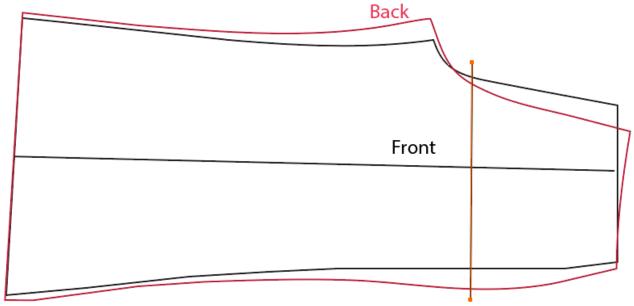
define waist.



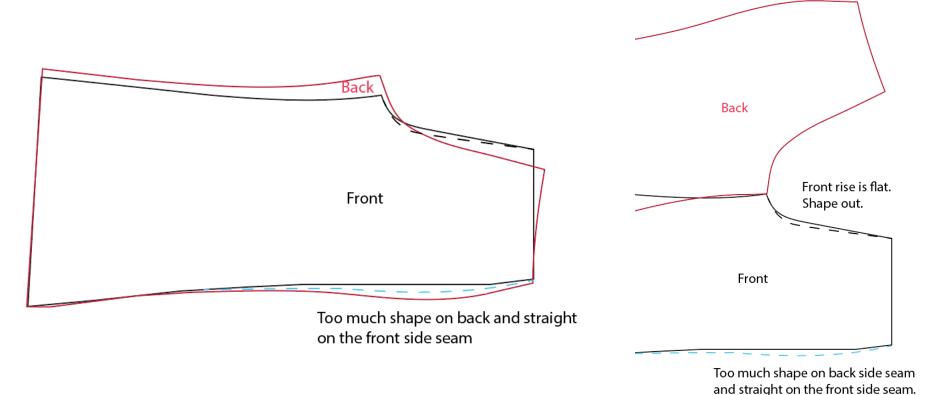
Is this pattern balanced?

Why?

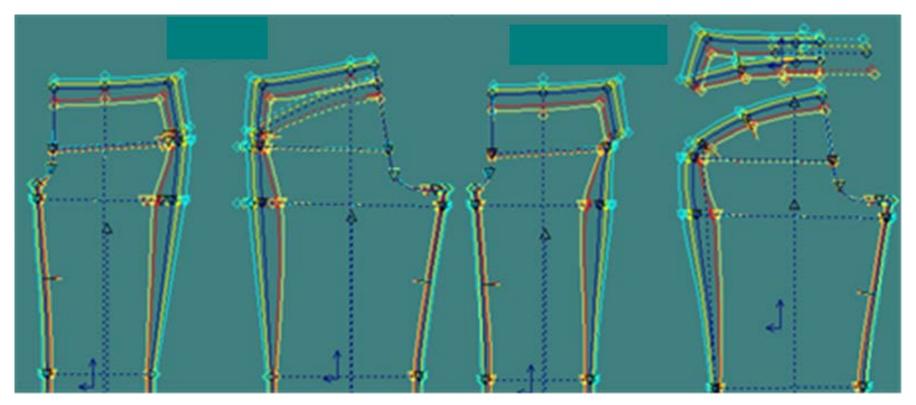




You should always walk the pattern as garment would be sewn as well as how the garment looks after sewn together. As you can see Back side seam has more shape than front side. Also the front rise is flat when view as if sewn together.

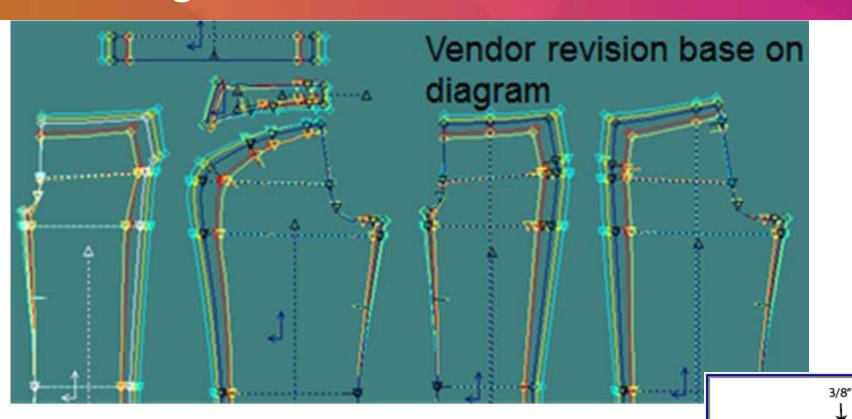


Has the Hip & Thigh grade been applied correctly? Is what they requested valid?



Vendor recommendation

THIGH	XS	S	M	L	XL
Original	7 5/8	8	9	9 1/2	10
Suggest	8 1/4	8 5/8	9	9 1/2	10



The hook was not grading. All the grade was on the outseam. To achieve the thigh spec the grade was distorting the outseam shape.

1/8"

Question & Answers