

Note

All measurements and drafting references used in this handout are based on the 5th Edition of Helen Joseph-Armstrong's **Patternmaking for Fashion Design**. While the same drafting approach is used in the 4th Edition, some measurements differ slightly between editions. To avoid unnecessary confusion, this handout refers only to the 5th Edition measurements and examples.

To avoid reproducing copyrighted material, only a limited selection of measurements relevant to the examples discussed are included in the handout.

CORE DISCOVERY

The front block is drafted using the Front **Bust Arc**.¹

The back block is drafted using the Back **High Bust Arc**.²

These measurements do not combine to equal the bust circumference.³

EXAMPLE SIZE 10

Measurement	Value
Bust Circumference	36"
Front Bust Arc	10.00
Back High Bust Arc	8.63
Combined Width x 2	37.26
Difference	+1.25 (rounded)

RESULT

Before 'drafting ease' is added, the Standard Figure is already approximately **1.25 inches larger** than the bust circumference. Although only Size 10 is used as an example here, the same relationship applies across all sizes.

For Example Size 12: Front Bust Arc = 10.38, Back Arc = 9, Bust Circumference = 37.5.

Although only 2 inches of wearing ease is added within the instructions, the finished block measures approximately 3.38 inches larger than the bust circumference at the bust level.

The additional 0.13 inch (above the initial 1.25 inches and the 2 inches of wearing ease) occurs because the bust level sits lower than the level where the initial block width is established.

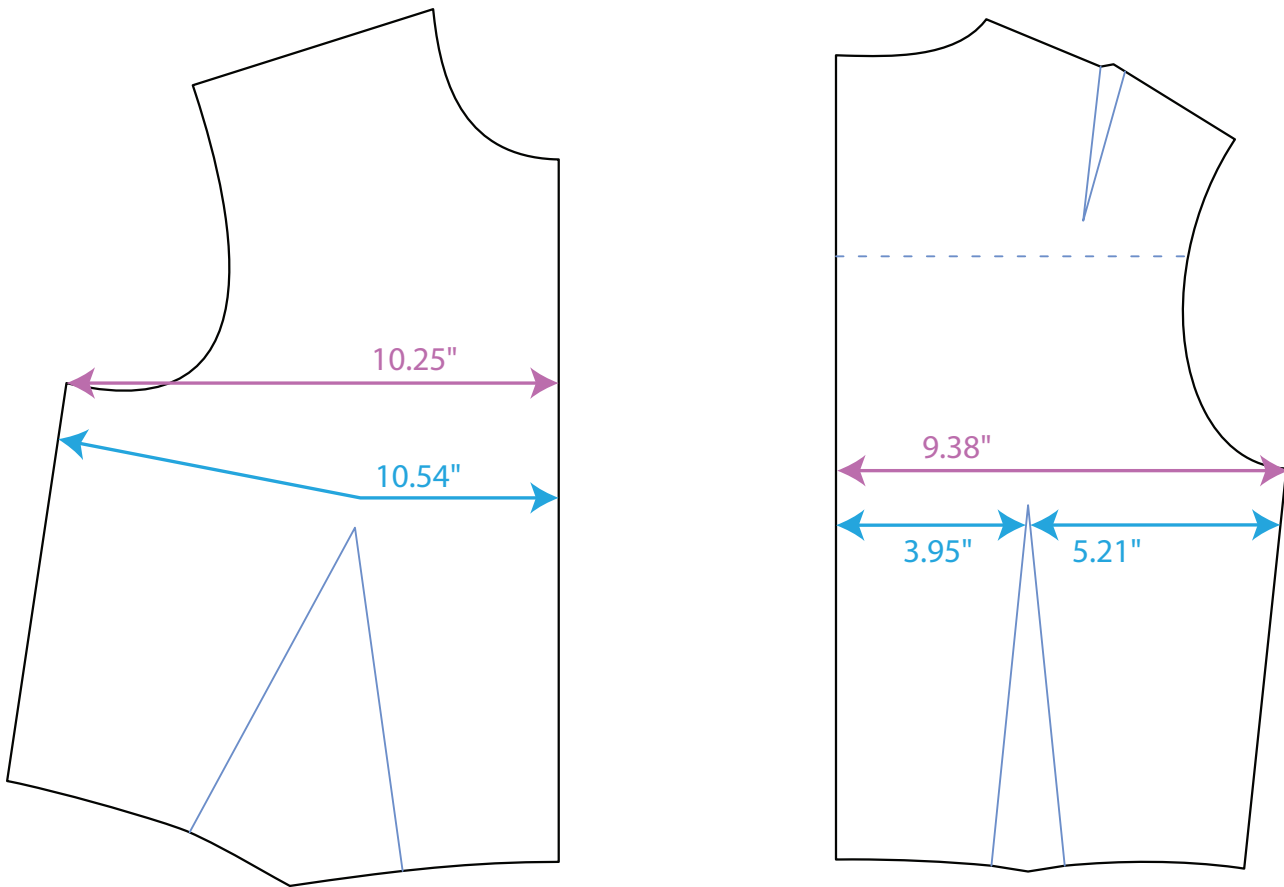
¹ Page 38 of the printed textbook; the Front Bust Arc (#17) is described as "Centre front, over bust point, ending 2 inches below armplate at side seam". Figure 6 shows the tape measure over the bust points.

² Page 37 of the printed textbook; the Back Arc (#18): "Centre Back to bottom of armplate". If you look at Figures 9, 10 & 15 in profile, you can see that the 'bottom of the armplate' is the High Bust level; significantly higher than the bust level.

³ In the measurement chart on page 40, the Front Bust Arc and the Back Arc in each size total approximately 1.25 inches more than the bust circumference.

Size 10 Block

Figure A: Measurements taken directly from the finished block

**‘Starting measurement’ at the High Bust level (shown in pink)**

10.25 front + 9.38 back = 19.63"

x 2 for the full block = 39.25"

Bust = 36 inches (see Page 1)

Difference = 3.25"

Important Note:

The 3.25" discussed here refers to bust ease. It does not indicate the amount of ease present at the High Bust level, which is a separate issue entirely. (See my next video: "The Overlooked Measurement – The High Bust")

Final width at the bust level

10.54 front + (3.95 + 5.21) back = 19.7"

x 2 for the full block = **39.38"** (rounded)

Bust = 36 inches (see Page 1)

Difference = 3.38"

CUSTOM FIGURES

Comparison of Final Ease (Imperial measurements) *(See Page 4 for Metric Measurements)*

The amounts of ease shown in this table are rough estimates based on:

- the starting width of the block
- and the ease added within the drafting instructions.

The actual amount of ease found on the finished block may differ due to other factors, such as bust depth and other assumptions built into the system.

An example of this is shown on Page 5.

Measurement (Imperial system in inches)	Sophie	Jackie	Didi	Maria	Carol	Beth
Bust Arc Front	9.25	13.5	9.84	10.63	10	13.68
Back Arc (High Bust Arc Back)	9.25	12	9.65	8.66	8	9.45
Total Half Block:	18.5	25.5	19.49	19.29	18	23.13
Starting Width of Full Block (at High Bust):	37	51	38.98	38.58	36	46.26
Ease Added in Instructions	2	2	2	2	2	2
Total (x)	39	53	40.98	40.58	38	48.26
Bust Circumference (y)	37.8	48.5	37.8	38.58	36.75	45
Difference (x - y)	1.2	4.5	3.18	2	1.25	3.26

Decimal values have been used throughout rather than fractional inch notation.

For example: $10.63 = 10 \frac{5}{8}$ & $23.13 = 23 \frac{1}{8}$

Calculation:

$(\text{Bust Arc Front} + \text{High Bust Arc Back}) \times 2 = \text{Starting Width of Block}$

$\text{Starting Width of Block} + 2 \text{ inches ease} = \text{Rough estimate of the final bust circumference including ease}$

$\text{Subtract the Bust Circumference to get the amount of ease}$

$= \text{Estimated final amount of ease}^*$

*This is intended only as a rough guide to the possible amount of ease (or lack of ease).

The estimated ease for Sophie (1.2") and Jackie (4.5") differ significantly from the Standard Figure's ease (3.25").

CUSTOM FIGURES

Comparison of Final Ease (Metric measurements)

The amounts of ease shown in this table are rough estimates based on:

- the starting width of the block
- and the ease added within the drafting instructions.

The actual amount of ease found on the finished block may differ due to other factors, such as bust depth and other assumptions built into the system.

An example of this is shown on Page 5.

Measurement (Metric system in cms)	Sophie	Jackie	Didi	Maria	Carol	Beth
Bust Arc Front	23.5	34.25	25	27	25.5	34.75
Back Arc (High Bust Arc Back)	23.5	30.6	24.5	22	20.25	24
Total Half Block:	47	64.85	49.5	49	45.75	58.75
Starting Width of Full Block (at High Bust):	94	129.7	99	98	91.5	117.5
Ease Added in Instructions	5	5	5	5	5	5
Total (x)	99	134.7	104	103	96.5	122.5
Bust Circumference (y)	96	123	96	98	93.25	114.25
Difference (x - y)	3	11.7	8	5	3.25	8.25

Calculation:

$(\text{Bust Arc Front} + \text{High Bust Arc Back}) \times 2 = \text{Starting Width of Block}$

$\text{Starting Width of Block} + 5 \text{ cm ease} = \text{Rough estimate of the final bust circumference including ease}$

$\text{Subtract the Bust Circumference to get the amount of ease}$

$= \text{Estimated final amount of ease}^*$

*This is intended only as a rough guide to the possible amount of ease (or lack of ease).

The estimated ease for Sophie (3 cm) and Jackie (11.7 cm) differ significantly from the Standard Figure's ease (8.5 cm).

Sophie's Block

The estimated amount of ease calculated on Page 3 for Sophie is 1.2". In Figure B, Sophie's block width approximately 1.2" ease. However, other factors – such as bust depth and the level at which the bust sits – can affect the final amount of ease.

The calculations shown in this handout are intended only as rough estimates. Their purpose is to demonstrate how changes in body proportions can significantly affect the final amount of ease when compared to the Standard Figure.

Figure B: Higher Bust Position

Final Measurement at bust level = 39" (99 cm)

Body Bust Circumference = 37.8" (96 cm)

Total ease = 1.2" (3 cm)

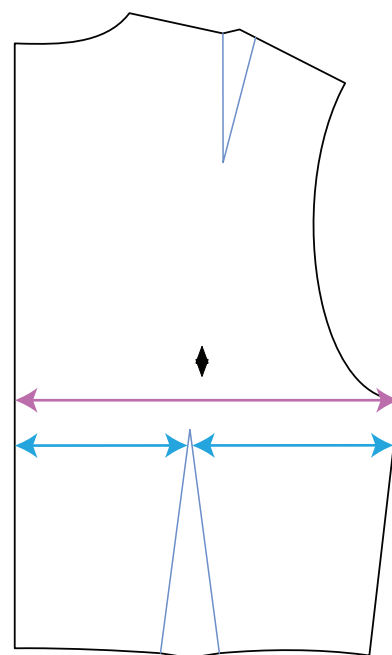
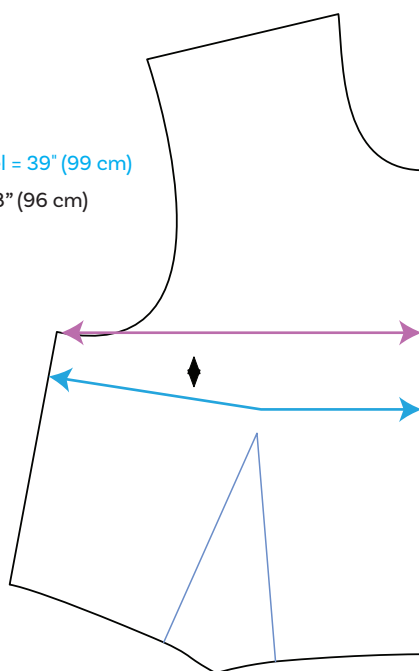


Figure C: Lower Bust Position

Final Measurement at bust level = 39.84" (101 cm)

Body Bust Circumference = 37.8" (96 cm)

Total ease = 2" (5 cm)

