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Standard Tables of Body Measurements for Girls, Sizes 7 to 16¹

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INTRODUCTION

These tables were developed from body measurements used currently by apparel manufacturers and retail organizations. The measurements were derived originally from the 1972 Voluntary Product Standard PS 54-72 by the U.S. Department of Commerce National Bureau of Standards.²

1. Scope

- 1.1 These tables list body measurements of girls, sizes 7 to 16. Although these are body measurements, they can be used as a baseline in designing apparel for girls in this size range when considering such factors as fabric type, ease for body movement, styling, and fit.
- 1.2 These tables list body measurements for Slim and Regular. Slim subjects are of same stature (height), with a slimmer body, and lower body weight than regular subjects as illustrated by the measurement charts.
- 1.3 The values stated in either acceptable SI units or inch-pound units shall be regarded separately as standard. The values stated in each system may not be exact equivalents; therefore, each system must be used independently of the other, without combining values in any way.
- 1.4 This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

2. Referenced Documents

- 2.1 ASTM Standards:
- D 123 Terminology Relating to Textile Materials³
- D 5219 Terminology Relating to Body Dimensions for Apparel Sizing⁴
- 2.2 ISO Standard:
- ISO 3635 Size Designation of Clothes, Definitions, and

Body Measurement Procedures⁵

3. Terminology

- 3.1 *Definitions*:
- 3.1.1 For definitions relating to body dimensions, refer to Terminology D 5219.
- 3.1.2 For definitions of other textile terms used in this standard, refer to Terminology D 123.

4. Significance and Use

4.1 The use of the body measurement information in Tables 1-4 will assist manufacturers in developing patterns and garments that are consistent with the current anthropometric characteristics of the population of interest. This practice should in turn reduce or minimize consumer confusion and dissatisfaction related to apparel sizing. (Also refer to ISO 3635 Size Designation Procedures.)

5. Apparatus

- 5.1 *Tape Measure*, dimensionally stable and approximately 15-mm (½-in.) wide and accurately graduated in mm (½-in.) increments.
 - 5.2 Scale, standard, calibrated body weight type.

6. Procedure

- 6.1 General:
- 6.1.1 For all vertical and most horizontal measurements, subject is to be standing erect without shoes and with feet approximately 15-cm (6-in.) apart.
- 6.1.2 Take measurements over regular undergarments normally worn.
- 6.1.3 Take all measurements from the same side of the body for consistency.
- 6.1.4 Refer to Terminology D 5219 for the location of all points to be measured.
 - 6.2 Body Measurements:

¹ These tables are under the jurisdiction of ASTM Committee D-13 on Textiles and are the direct responsibility of Subcommittee D13.55 on Body Measurement for Apparel Sizing.

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² U.S. Department of Commerce, Voluntary Product Standard: Body Measurements for the Sizing of Girls' Apparel, NIST Publication No. PS 54-172, Washington

³ Annual Book of ASTM Standards, Vol. 07.01.

⁴ Annual Book of ASTM Standards, Vol. 07.02.

⁵ Available from American National Standards Institute, 11 West 42nd Street, 13th Floor, New York, NY 10036.

TABLE 1 Girls Sizes 7-16 (Slim) Body Measurements, SI Units

	•		•			
Size	78	88	10S	12S	14S	16S
Height, cm	129.5	134.6	139.7	146.0	152.4	158.7
Body Weight, kg	24.0	26.8	30.4	34.9	40.4	46.7
	Girth Measurer	ments in Centime	tres			
Bust Girth (Chest Girth)	62.2	64.8	68.6	72.4	76.2	80.0
Waist Girth	52.1	53.3	55.9	58.4	61.0	63.5
Hip Girth	65.4	67.9	71.8	76.8	81.9	87.0
Neck Base Girth	29.2	29.8	31.1	32.4	33.7	34.9
Armscye Circumference	27.9	29.2	30.5	32.4	34.3	36.2
Upper-Arm Girth	17.1	18.1	19.0	20.0	21.3	22.5
Elbow Girth	19.7	20.6	21.6	22.5	23.8	25.1
Thigh Girth	35.6	37.1	39.4	42.2	45.1	47.9
Knee Girth	26.0	27.3	28.6	29.8	31.4	33.0
Calf Girth	24.4	25.4	26.7	27.9	29.8	31.7
Ankle Girth	18.7	19.4	20.0	20.6	21.3	21.9
Total Vertical Trunk Length	110.5	115.6	120.6	127.0	133.3	139.7
Total Crotch Length	52.7	54.6	57.8	61.0	64.1	67.3
	Vertical Measure	ements in Centim	etres			
Cervicale Height	108.6	113.3	118.1	123.8	129.5	135.3
Head and Neck Length	21.0	21.3	21.6	22.2	22.9	23.5
Cervicale to Knee	72.7	75.9	79.1	82.9	86.7	90.5
Armscye to Waist	14.3	14.9	15.6	16.2	17.1	18.1
Cervicale to Back Waist	27.9	29.2	30.5	31.7	33.7	35.6
Front Waist Length	24.8	26.0	27.3	28.6	30.5	32.4
Scye Depth	13.3	14.0	14.6	15.2	16.2	17.1
Waist Height	81.3	85.4	89.5	94.0	98.4	102.9
Hip Height	65.4	68.6	71.8	75.2	78.7	82.2
Waist to Knee	45.4	47.9	50.5	53.0	55.6	58.1
Waist to Hip Height	16.5	16.8	17.5	18.4	19.4	20.3
Crotch Height	58.7	61.6	64.5	67.6	70.8	74.0
Knee Height	35.9	37.5	39.1	41.0	42.9	44.8
Ankle Height	6.3	6.3	6.7	6.7	6.7	7.0
	Width and Length Me	easurements in C	entimetres			
Shoulder Length	8.9	9.0	9.2	9.4	9.5	9.7
Cross-Back Width	26.7	27.3	28.6	29.8	31.1	32.4
Cross-Chest Width	22.9	23.5	24.8	26.0	27.3	28.6
Arm Length	45.4	47.6	49.8	52.4	54.9	57.5
Shoulder and Arm Length	54.3	56.7	59.1	61.8	64.5	67.1
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- 6.2.1 *Height*—Measure from the top of the head to the soles of the feet.
 - 6.2.2 Body Weight—Weigh the subject on the scale.
- 6.2.3 Bust Girth (chest girth)—Measure horizontally around the body under the arms and across the nipples including the lower portion of the shoulder blades.
- 6.2.4 Waist Girth—Measure horizontally around the body at waist height.
- 6.2.5 *Hip Girth*—Measure horizontally around the body at hip height.
- 6.2.6 *Neck Base Girth*—Measure around the neck, over the cervicale at the back and the top of the collar bone at the front.
- 6.2.7 Armscye Circumference—With the arm down, measure the distance from the shoulder joint through the front-break point, the armpit, the back-break point, and back up to the starting point.
- 6.2.8 *Upper-Arm Girth*—Measure the circumference of the arm midway between the elbow and shoulder joint.
- 6.2.9 *Elbow Girth*—Measure the circumference of the elbow while the arm is bent at $1.57 \text{ rad } (90^{\circ})$.
- 6.2.10 *Thigh Girth*—Measure circumference of the upper leg close to the crotch.
- 6.2.11 *Knee Girth*—With the leg straight, measure the knee circumference over the knee cap and parallel to the floor.
 - 6.2.12 Calf Girth—Measure the maximum circumference

- of the lower leg between the knee and the ankle and parallel to the floor.
- 6.2.13 *Ankle Girth*—Measure the ankle circumference over the inner and outer bony prominence at the lower end of the lower leg.
- 6.2.14 *Total Vertical Trunk Length*—Measure from a point on the shoulder, midway between the neck and the normal armscye line, to the bottom of the crotch and back up to the shoulder, taking care to avoid constriction at the crotch.
- 6.2.15 *Total Crotch Length*—Measure from the center front waist level through the crotch to the center back waist level.
- 6.2.16 *Cervicale Height*—Measure the plumb line distance from the cervicale to the soles of the feet.
- 6.2.17 *Head and Neck Length*—With the head erect and the neck unbent, measure the plumb line distance from the crown to the cervicale.
- 6.2.18 *Cervicale to Knee*—Measure the plumb line distance from the cervicale to the knee midpoint.
- 6.2.19 *Armscye to Waist*—Measure from the mid-underarm point along the side of the body to the waist height.
- 6.2.20 *Cervicale to Back Waist*—Measure along the spine from cervicale to waist.
- 6.2.21 *Front Waist Length*—Measure from the center front neck base line to the center front waist level.
 - 6.2.22 Scye Depth—Measure along the spine from the

TABLE 2 Girls Sizes 7-16 (Regular) Body Measurements, SI Units

0:	7R	8R	10R	12R	14R	400
Size						16R
Height, cm	129.5 27.2	134.6 29.9	139.7 33.6	146.0	152.4 43.5	158.7
Body Weight, kg				38.1	43.5	49.9
	Girth Measure	ments in Centime	tres			
Bust Girth (Chest Girth)	66.0	68.6	72.4	76.2	80.0	83.8
Waist Girth	57.1	58.4	61.0	63.5	66.0	68.6
Hip Girth	69.8	72.4	76.2	81.3	86.4	91.4
Neck Base Girth	30.2	30.8	32.1	33.3	34.6	35.9
Armscye Circumference	29.2	30.5	31.7	33.7	35.6	37.5
Upper-Arm Girth	18.7	19.7	20.6	21.6	22.9	24.1
Elbow Girth	20.6	21.6	22.5	23.5	24.8	26.0
Thigh Girth	40.0	41.6	43.8	46.7	49.5	52.4
Knee Girth	27.3	28.6	29.8	31.1	32.7	34.3
Calf Girth	25.7	26.7	27.9	29.2	31.1	33.0
Ankle Girth	18.7	19.4	20.0	20.6	21.3	21.9
Total Vertical Trunk Length	113.0	118.1	123.2	129.5	135.9	142.2
Total Crotch Length	54.6	56.5	59.7	62.9	66.0	69.2
	Vertical Measure	ements in Centime	etres			
Cervicale Height	108.6	113.3	118.1	123.8	129.5	135.3
Head and Neck Length	21.0	21.3	21.6	22.2	22.9	23.5
Cervicale to Knee	72.7	75.9	79.1	82.9	86.7	90.5
Armscye to Waist	14.3	14.9	15.6	16.2	17.1	18.1
Cervicale to Back Waist	27.9	29.2	30.5	31.7	33.7	35.6
Front Waist Length	24.8	26.0	27.3	28.6	30.5	32.4
Scye Depth	13.7	14.3	14.9	15.6	16.5	17.5
Waist Height	81.3	85.4	89.5	94.0	98.4	102.9
Hip Height	65.4	68.6	71.8	75.2	78.7	82.2
Waist to Knee	45.4	47.9	50.5	53.0	55.6	58.1
Waist to Hip Height	16.8	17.1	17.8	18.7	19.7	20.6
Crotch Height	58.7	61.6	64.5	67.6	70.8	74.0
Knee Height	35.9	37.5	39.1	41.0	42.9	44.8
Ankle Height	6.3	6.3	6.7	6.7	6.7	7.0
	Width and Length Me	easurements in Ce	entimetres			
Shoulder Length	9.2	9.4	9.5	9.7	10.0	#REF!
Cross-Back Width	27.3	27.9	29.2	30.5	31.7	33.0
Cross-Chest Width	23.8	24.4	25.7	27.0	28.3	29.5
Arm Length	45.7	47.9	50.2	52.7	55.2	57.8
Shoulder and Arm Length	54.9	57.3	59.7	62.4	65.1	67.8
Cervicale to Wrist	59.7	62.2	65.1	68.3	71.4	74.6

cervicale to a point level to an imaginary horizontal line connecting the mid-underarm points.

- 6.2.23 *Waist Height*—Measure the plumb line distance from the waist to the soles of the feet.
- 6.2.24 *Hip Height*—Measure the plumb line distance at the side of the body from the hip to the soles of the feet.
- 6.2.25 *Waist to Knee*—Measure the plumb line distance at the side of the body from the waist to the knee midpoint.
- 6.2.26 Waist to Hip Height—Measure the plumb line distance at the side of the body from the waist to the hip.
- 6.2.27 *Crotch Height*—Measure the plumb line distance from the midpoint of the crotch to the soles of the feet.
- 6.2.28 *Knee Height*—Measure the plumb line distance from the knee midpoint to the soles of the feet.
- 6.2.29 *Ankle Height*—Measure the plumb line distance from the outer ankle bone to the soles of the feet.
- 6.2.30 *Shoulder Length*—With the arm hanging down, measure from the side neck base to the shoulder joint.
- 6.2.31 *Cross-Back Width*—Measure across the back from back-break point to back-break point at approximately the same level as the chest.

- 6.2.32 *Cross-Chest Width*—Measure across the front of the chest from front-break point to front-break point.
- 6.2.33 *Arm Length*—With the arm bent at 1.57 rad (90°) and the hand placed on the hip, measure from the shoulder joint along the outside of the arm over the elbow to the prominent wrist bone.
- 6.2.34 Shoulder and Arm Length—With the arm bent at 1.57 rad (90°), measure from the side neck base over the top of the shoulder to the shoulder joint, then along the outside of the arm over the elbow to the prominent wrist bone.
- 6.2.35 *Cervicale to Wrist*—With the arm bent at 1.57 rad (90°) , measure from the cervicale over the top of the shoulder to the shoulder joint, then along the outside of the arm over the elbow to the prominent wrist bone.

7. Keywords

7.1 apparel; body measurements; garment sizes; girls; tables

TABLE 3 Girls Sizes 7-16 (Slim) Body Measurements, Inch-Pound Units

Height, in Body Weight, lb Bust Girth (Chest Girth) Waist Girth	51 53 Girth Measu 24 ½ 20 ½	53 59 Irements in Inches	55 67 s	57½ 77	60 89	62 ½ 103
Bust Girth (Chest Girth) Waist Girth	Girth Measu 24 ½	rements in Inches		77	89	103
Waist Girth	24 1/2		S			
Waist Girth		05.47				
	20 1/2	25 1/2	27	28 ½	30	31 ½
lin Cinth	20 /2	21	22	23	24	25
Hip Girth	25 ³ / ₄	26 3/4	28 1/4	30 1/4	32 1/4	34 1/4
Neck Base Girth	11 1/2	11 3/4	12 1/4	12 3/4	13 1/4	13 ¾
Armscye Circumference	11	11 1/2	12	12 3/4	13 1/2	14 1/4
Upper-Arm Girth	6 3/4	7 1/8	7 1/2	7 1/8	8 3/8	8 1/8
Elbow Girth	7 3/4	8 1/8	8 1/2	8 7/8	9 %	9 7/8
Thigh Girth	14	14 %	15 ½	16 ⁵ / ₈	17 3/4	18 %
Knee Girth	10 1/4	10 ¾	11 1/4	11 3/4	12 ¾	13
Calf Girth	9 5/8	10	10 ½	11	11 3/4	12 1/2
Ankle Girth	7 3/8	7 5/8	7 7/8	8 1/8	8 %	8 %
Total Vertical Trunk Length	43 1/2	45 1/2	47 1/2	50	52 1/2	55
Total Crotch Length	20 3/4	21 1/2	22 3/4	24	25 1/4	26 1/2
	Vertical Meas	surements in Inche	es			
Cervicale Height	42 3/4	44 5/8	46 1/2	48 ¾	51	53 1/4
Head and Neck Length	8 1/4	8 3/8	8 1/2	8 3/4	9	9 1/4
Cervicale to Knee	28 5/8	29 7/8	31 1/8	32 5/8	34 1/8	35 %
Armscye to Waist	5 ⁵ /8	5 7/8	6 1/8	6 3/8	6 3/4	7 1/8
Cervicale to Back Waist	11	11 1/2	12	12 1/2	13 1/4	14
Front Waist Length	9 3/4	10 1/4	10 3/4	11 1/4	12	12 3/4
Scye Depth	5 1/4	5 1/2	5 3/4	6	6 3/8	6 3/4
Waist Height	32	33 %	35 1/4	37	38 ¾	40 1/2
Hip Height	25 ³ / ₄	27	28 1/4	29 5/8	31	32 3/8
Waist to Knee	17 7/8	18	19 %	20 1/8	21 1/8	22 1/8
Waist to Hip Height	6 ½	6 5/8	6 1/8	7 1/4	7 5/8	8
Crotch Height	23 1/8	24 1/4	25 %	26 5/8	27 1/8	29 1/8
Knee Height	14 1/8	14 3/4	15 %	16 1/8	16 %	17 %
Ankle Height	2 ½	2 ½	2 5/8	2 5/8	2 5/8	2 3/4
	Width and Length	Measurements in	Inches			
Shoulder Length	3 ½	3 %16	3 5/8	3 11/16	3 3/4	3 13/16
Cross-Back Width	10 ½	10 3/4	11 1/4	11 3/4	12 1/4	12 3/4
Cross-Chest Width	9	9 1/4	9 3/4	10 1/4	10 3/4	11 1/4
Arm Length	17 1/8	18 3/4	19 %	20 5/8	21 %	22 5/8
Shoulder and Arm Length	21 3/8	22 5/16	23 1/4	24 5/16	25 %	26 7/16
Cervicale to Wrist	23 1/4	24 1/4	25 ¾ 25 ¾	26 5/8	27 7/8	29 1/8

TABLE 4 Girls Sizes 7-16 (Regular) Body Measurements, Inch-Pound Units

Size	7R	8R	10R	12R	14R	16R
Height, in	51	53	55	571/2	60	62 1/2
Body Weight, Ib	60	66	74	84	96	110
	Girth Measu	rements in Inches	s			
Bust Girth (Chest Girth)	26	27	28 1/2	30	31 ½	33
Vaist Girth	22 1/2	23	24	25	26	27
Hip Girth	27 1/2	28 1/2	30	32	34	36
Neck Base Girth	11 7/8	12 1/8	12 %	13 1/8	13 %	14 1/8
Armscye Circumference	11 ½	12	12 ½	13 1/4	14	14 3/4
Jpper-Arm Girth	7 3/8	7 3/4	8 1/8	8 1/2	9	9 1/2
Elbow Girth	8 1/8	8 1/2	8 7/8	9 1/4	9 3/4	10 1/4
Γhigh Girth	15 3/4	16 ¾	17 1/4	18 %	19 ½	20 %
Knee Girth	10 3⁄4	11 1/4	11 3/4	12 1/4	12 1/8	13 ½
Calf Girth	10 1/8	10 ½	11	11 1/2	12 1/4	13
Ankle Girth	7 3/8	7 %	7 1/8	8 1/8	8 3/8	8 %
Total Vertical Trunk Length	44 1/2	46 1/2	48 1/2	51	53 ½	56
Total Crotch Length	21 ½	22 1/4	23 1/2	24 3/4	26	27 1/4
	Vertical Meas	surements in Inch	es			
Cervicale Height	42 3/4	44 5/8	46 1/2	48 3/4	51	53 1/4
lead and Neck Length	8 1/4	8 3/8	8 1/2	8 3/4	9	9 1/4
Cervicale to Knee	28 %	29 7/8	31 1/8	32 %	34 1/8	35 %
Armscye to Waist	5 ⁵ /8	5 1/8	6 1/8	6 3/8	6 3/4	7 1/8
Cervicale to Back Waist	11	11 1/2	12	12 1/2	13 1/4	14
Front Waist Length	9 3/4	10 1/4	10 ¾	11 1/4	12	12 3/4
Scye Depth	5 3/8	5 %	5 ⁷ / ₈	6 1/8	6 1/2	6 1/8
Vaist Height	32	33 %	35 1/4	37	38 ¾	40 1/2
lip Height	25 3/4	27	28 1/4	29 %	31	32 3/8
Vaist to Knee	17 %	18 %	19 7/8	20 7/8	21 7/8	22 7/8
Vaist to Hip Height	6 5/8	6 3/4	7	7 3/8	7 3/4	8 1/8
Crotch Height	23 1/8	24 1/4	25 %	26 %	27 1/8	29 1/8
Knee Height	14 1/8	14 3/4	15 %	16 1/8	16 7/8	17 ⁵ / ₈
Ankle Height	2 1/2	2 1/2	2 5/8	2 1/8	2 5/8	2 3/4
	Width and Length	Measurements in	Inches			
Shoulder Length	3 %	3 11/16	3 3/4	3 13/16	3 1/8	3 15/16
Cross-Back Width	10 3/4	11	11 1/2	12	12 1/2	13
Cross-Chest Width	9 3/8	9 5/8	10 1/8	10 %	11 1/8	11 %
Arm Length	18	18 7/ ₈	19 ¾	20 3/4	21 3/4	22 3/4
Shoulder and Arm Length	21 5/8	22 %16	23 1/2	24 %16	25 %	26 11/16
Cervicale to Wrist	23 1/2	24 1/2	25 %	26 7/8	28 1/8	29 3/8

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