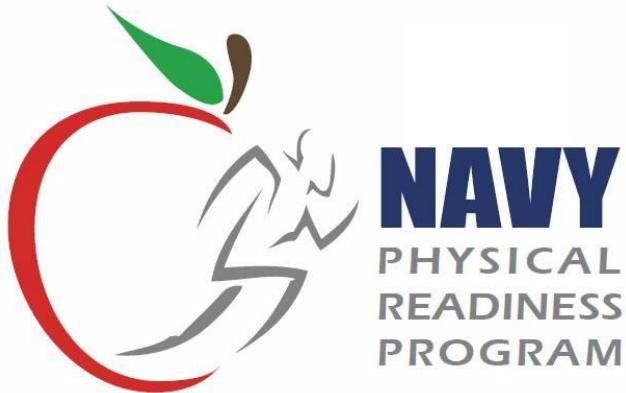


DEC 2025



## GUIDE-4

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# BODY COMPOSITION ASSESSMENT (BCA)

APPROVED  
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N171 BRANCH HEAD

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## Section 1: Body Composition Assessment (BCA) Standards

1. **BCA Requirements.** Sailors are required to complete an official BCA, regardless of ability or authorization to participate in the PRT/CFT portion of the PFA, unless medically waived or exempted for pregnancy/post-pregnancy/postpartum. This requirement includes Sailors with an overdue or incomplete Periodic Health Assessment (PHA), Deployment-Related Health Assessment (DRHA), or NAVPERS 6110/3 (PARFQ). The BCA must be completed within 45 days of, but not less than 24 hours prior to, participation in the PRT. The official BCA is the first and only BCA authorized once the command PFA cycle has begun. **BCA retests are not authorized.** The CO/OIC may assign a participation status of “UA” if the PRT is not completed within 45 days of the official BCA.
  - a. Only a certified CFL and/or trained ACFLs are authorized to conduct official BCA measurements. A minimum of two certified, trained, and designated in writing CFL/ACFLs are required to conduct official BCA measurements and sign the official BCA score sheet (NAVPERS 6110/10).
  - b. Official BCA measurements are prohibited by Medical and/or Morale Welfare and Recreation (MWR) personnel nor do they override official BCA measurements taken by the CFL or ACFL.
  - c. Private (i.e., one-on-one) BCA measurements are prohibited. Sailors are not entitled to private, same sex CFL/ACFL measurements. However, commands are encouraged to have both qualified male and female CFL/ACFLs whenever possible.
2. **BCA Methods.** A total of three measurements will be collected and recorded for each Sailor during the official BCA. The measurements are **height** (inches), **waist** (umbilicus/bellybutton, inches), and **weight** (lbs). The collection of all three measurements allows for baselining of current procedures and establishing how the change affects Sailors as we transition to these revised procedures. The updated BCA procedures will consist of a two-step BCA process. The methods to determine a Sailor’s BCA are described in Sections 2 and 3.
  - a. **Waist-to-Height Ratio (WHtR) measurement (Step-1).** The WHtR is an indicator of body fat distribution (particularly visceral fat) and is related to health risks such as heart disease, diabetes and metabolic syndrome. The WHtR calculated by taking the waist measurement and dividing it by the height measurement.
  - b. **Body Composition (BC) calculation (Step-2).** The BC calculation is an estimate of body fat percentage (BF%). The maximum allowable body fat limits are 26% for males and 36% for females. Sailors who are within their sex-specific body fat percentages are Within Standards (WS) for the BCA. Sailors who exceed the maximum allowable body fat limits are Not Within Standards (NWS) and will result in the overall PFA documented as a failure for the cycle (*unless they meet the requirements for the*

*High-Performance BCA Exemption. Refer to Guide-1 for additional details).* BF% is calculated from measurements of waist, height, and weight.

- c. Sailors who are not within standards for both Step-1 and Step-2 are still required to participate in the PRT/CFT. However, they must obtain medical clearance prior to participating in the PRT/CFT.
  - d. No substitute methods (e.g., underwater weighing, skin fold calipers, body mass index, bio-impedance, etc.) of assessment are permitted.
  - e. The official BCA is final and will not be reversed by a subsequent medical waiver for BCA. Sailors must address any potential medical issues prior to the official BCA.
3. Altering BCA. CFL/ACFLs are required to remain vigilant for Sailors who attempt to alter their BCA measurements. Sailors are discouraged from using extreme body fat reducing methods to meet BCA standards. Dehydration methods are dangerous, and Sailors put themselves at risk during the PFA if they have not reduced body fat through a proper diet and exercise program. If temporary altering is detected, the Sailor must wait at least 72 hours before re-attempting the official BCA measurement. Any attempt to influence the BCA measurement through intimidation, coercion, or other means shall be reported to the CO/OIC and may result in disciplinary action under the UCMJ.

## Section 2: Measurement Guidelines and Procedures

### 1. Uniform and Equipment.

a. **Uniform.** All measurements for the official BCA must be conducted in the official Navy Physical Training Uniform (PTU) or Optional PTU (OPTU).

b. **Tape Measure Specifications.** Use a tape measure made of non-stretchable material, preferably fiberglass. Do not use cloth or steel tape measures. The preferred tape is one that is self-retracting, with locking capability, which can accurately measure in both 1/16" inch and millimeter increments (e.g., Myotape, digital Myotape). The tape measure width should be 1/4 inch – 3/8 inch and calibrated (i.e., compared with a yardstick or metal ruler). This is done by aligning the tape measure with the quarter inch markings on the ruler.

### 2. Height Measurement Guidelines and Procedures. Procedures for properly conducting height measurements are as follows:

a. The Sailor must remove their shoes and wear socks during height measurement. Sailors are prohibited from including any type of height enhancements (e.g., gel inserts) and are subject to military disciplinary action under the Uniform Code of Military Justice (UCMJ) if in violation of this order.

b. Sailor will stand on a flat surface, at attention, with head held horizontal, looking directly forward, and the chin parallel to the deck. The body should be straight, but not rigid.

c. Height measurements will be taken at the closest part of the Sailor's scalp. Hair bulk for the Sailor will not exceed the prescribed grooming standards in the Navy Uniform Regulations manual. If hair bulk interferes with being able to get an accurate height, the Sailor may be asked to undo their hairstyle.

d. The exact (raw score) height measurement is to be recorded on the official BCA Score Sheet. Height measurements will be rounded up to nearest 1/2 inch.

### 3. Weight Measurement Guidelines and Procedures. Weight measurements are required for all Sailors regardless of Step-1 outcome. Procedures for properly conducting weight measurement are as follows:

a. The weight measurement will be taken with the Sailor in Navy PTU/OPTU, on calibrated scales (balance beam or digital) with shoes removed and socks worn.

b. The exact (raw score) weight measurement is to be recorded on the BCA Score Sheet. Weight measurements will be rounded to the nearest pound. If the weight fraction is less than a 1/2 pound, round down to the nearest pound. If the weight fraction

is a  $\frac{1}{2}$  pound or greater, round up to the nearest pound. No deduction for clothing is permitted.

#### 4. Waist Measurement Guidelines and Procedures

##### a. **Waist Measurement Guidelines:**

(1) Waist measurements are to be measured at the umbilicus (belly button) from the right side of the body, keeping the tape parallel to the deck.

(2) When measuring the waist, apply the tape measure so that it contacts the skin, conforms to the body surface being measured, and does not compress the underlying soft tissues.

(3) All measurements are to be taken two times and rounded down to the nearest  $\frac{1}{2}$  inch. If the measurements differ by more than one inch, take an additional measurement and compute a mathematical average of the two closest measurements, which have been rounded down to the nearest  $\frac{1}{2}$  inch, and record the exact average value (which is NOT rounded again).

##### Rounding Example

Waist Measurement 1 = 34.25	34
Waist Measurement 2 = 32.5	32.5
Waist Measurement 3 = 32.25	32

##### Average Waist Measurement:

1. Add the two closest rounded measurements that do not differ more than 1 inch; then
2. Divide the sum by 2 to get the average:  

$$(32.5 + 32) / 2 = 32.25$$
3. Round down to the nearest  $\frac{1}{2}$  inch:  
Rounded Waist Measurement = 32

##### b. **Waist Measurement Procedures:**

(1) The Sailor will stand with their feet shoulder width apart and the CFL/ACFL will start the measurement on the right side of the Sailor. The measuring tape will encircle the Sailor's abdomen across the umbilicus (bellybutton) with the tape parallel to the deck and the end of the tape measure vertically in line with the armpit (mid-axillary line).

(2) The Sailor may use one hand to initially assist the CFL in anchoring the tape measure to the body, but must remove the hand from the tape measure before the

official measurement is recorded. The Sailor will remain stationary while the CFL conducts the measurement by initially moving around the Sailor to place the tape in a horizontal plane around the abdomen across the umbilicus. The measurement will be taken on bare skin. The ACFL will assist in holding the shirt out of the way so the Sailor's arms can be kept down by their sides at the time the measurement is taken. The CFL will ensure tape is parallel to the deck across the umbilicus and is snug but does not compress the skin tissue.

(3) The head should be horizontal, looking directly forward with the chin parallel to the deck. The CFL will take the measurement at the end of the Sailor's normal respiration and with their arms down. Discourage the Sailor from holding their breath by taking the measurement after several exhales.



(4) If there are any indications the Sailor has attempted to alter the waist measurement, turn the Sailor away for 72 hours and report this incident to the triad.

## Section 3: BCA Calculation Guidelines and Procedures

1. Waist-to-Height Ratio (WHTR) Calculation (Step-1). The WHTR is calculated by taking the waist measurement and dividing it by the height measurement. The WHTR will be rounded down to the fourth decimal place (i.e. 0.5499). If the Sailor's WHTR is equal to or less than 0.5499 for the rounded waist and rounded height measurements, the Sailor is within BCA standards for Step-1, and Step-2 is not required. If the Sailor is equal to or greater than 0.5500, then the Sailor has exceeded the maximum ratio and must participate in the Body Composition Calculation (Step-2). Refer to Table-1 for maximum waist for height allowances.

2. Body Composition (BC) Calculation (Step-2).

a. **Calculate Height-Waist Difference**. Calculate the height-waist difference by subtracting the rounded waist measurement from the rounded height measurement.

$$\text{Height-Waist Difference} = \text{Height (inches)} - \text{Waist (inches)}$$

b. **Calculate Body Fat Percent (BF%)**. CFL/ACFL will need the Height-Waist Difference calculation and the weight measurement. Refer to Table-2 (Males) and Table-3 (Females) for BF% allowances.

(1) To determine BF%, locate the column which matches the Sailor's weight (rounded to the nearest pound) and the appropriate row in the table which matches the Sailor's calculated height-waist difference.

(2) This number represents Sailor's estimated BF%.

(3) For values that exceed the limits in Table-2 or Table-3, record the raw measurements in inches on the official BCA score sheet (NAVPERS 6110/10). The official BF% will be calculated once the raw measurements are entered into PRIMS. After entering the measurements, record the official PRIMS generated BF% on the BCA score sheet to be retained as a paper record. BF% outcomes that are determined in this manner must be entered into PRIMS before the Sailor participates in the PRT or CFT.

## Section 4: BCA Tables

Table-1: Maximum Waist for Height

Table-2: Body Fat Percent Estimation for Men

Table-3: Body Fat Percent Estimation for Women

**Table-1: Maximum Waist for Height Screening Table**

Height	Max Waist Allowed	Resulting Ratio	Height	Max Waist Allowed	Resulting Ratio
48	26	0.5417	66	36	0.5455
48.5	26.5	0.5464	66.5	36.5	0.5489
49	26.5	0.5408	67	36.5	0.5448
49.5	27	0.5455	67.5	37	0.5481
50	27	0.54	68	37	0.5441
50.5	27.5	0.5446	68.5	37.5	0.5474
51	28	0.549	69	37.5	0.5435
51.5	28	0.5437	69.5	38	0.5468
52	28.5	0.5481	70	38	0.5429
52.5	28.5	0.5429	70.5	38.5	0.5461
53	29	0.5472	71	39	0.5493
53.5	29	0.5421	71.5	39	0.5455
54	29.5	0.5463	72	39.5	0.5486
54.5	29.5	0.5413	72.5	39.5	0.5448
55	30	0.5455	73	40	0.5479
55.5	30.5	0.5495	73.5	40	0.5442
56	30.5	0.5446	74	40.5	0.5473
56.5	31	0.5487	74.5	40.5	0.5436
57	31	0.5439	75	41	0.5467
57.5	31.5	0.5478	75.5	41.5	0.5497
58	31.5	0.5431	76	41.5	0.5461
58.5	32	0.547	76.5	42	0.549
59	32	0.5424	77	42	0.5455
59.5	32.5	0.5462	77.5	42.5	0.5484
60	32.5	0.5417	78	42.5	0.5449
60.5	33	0.5455	78.5	43	0.5478
61	33.5	0.5492	79	43	0.5443
61.5	33.5	0.5447	79.5	43.5	0.5472
62	34	0.5484	80	43.5	0.5438
62.5	34	0.544	80.5	44	0.5466
63	34.5	0.5476	81	44.5	0.5494
63.5	34.5	0.5433	81.5	44.5	0.546
64	35	0.5469	82	45	0.5488
64.5	35	0.5426	82.5	45	0.5455
65	35.5	0.5462	83	45.5	0.5482
65.5	36	0.5496	83.5	45.5	0.5449

**TABLE-2: Male BF% Estimation**  
**(Measurements needed: Height, Waist, and Weight)**

	Weight (lbs)																			
	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
35.5	16	16	16	16	16	16	16	17	17	17	17	17	17	17	17	17	17	17	17	17
35	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
34.5	17	17	17	17	17	17	17	17	17	17	17	17	17	17	18	18	18	18	18	18
34	17	17	17	17	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
33.5	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
33	18	18	18	18	18	18	18	18	18	18	18	18	18	19	19	19	19	19	19	19
32.5	18	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
32	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	20
31.5	19	19	19	19	19	19	19	19	19	20	20	20	20	20	20	20	20	20	20	20
31	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
30.5	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	21	21	21	21
30	20	20	20	20	20	20	21	21	21	21	21	21	21	21	21	21	21	21	21	21
29.5	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
29	21	21	21	21	21	21	21	21	21	21	21	21	21	21	22	22	22	22	22	22
28.5	21	21	21	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
28	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
27.5	22	22	22	22	22	22	22	22	22	22	23	23	23	23	23	23	23	23	23	23
27	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
26.5	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	24
26	23	23	23	23	23	23	23	24	24	24	24	24	24	24	24	24	24	24	24	24
25.5	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
25	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	25	25	25	25	25
24.5	24	24	24	24	24	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
24	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
23.5	25	25	25	25	25	25	25	25	25	25	25	25	25	26	26	26	26	26	26	26
23	25	25	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
22.5	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	27
22	26	26	26	26	26	26	26	26	26	27	27	27	27	27	27	27	27	27	27	27
21.5	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27
21	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	28	28	28	28

**TABLE-2: Male BF% Estimation**  
**(Measurements needed: Height, Waist, and Weight)**

Height-Waist Difference (Height – Waist, inches)	Weight (lbs)																			
	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140
36.5	16	16	16	16	16	16	16	17	17	17	17	17	17	17	17	17	17	17	17	17
36	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
35.5	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	18	18	18	18	18
35	17	17	17	17	17	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
34.5	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
34	18	18	18	18	18	18	18	18	18	18	18	18	19	19	19	19	19	19	19	19
33.5	18	18	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
33	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	20
32.5	19	19	19	19	19	19	19	19	19	19	20	20	20	20	20	20	20	20	20	20
32	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
31.5	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	21	21	21	21
31	20	20	20	20	20	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
30.5	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
30	21	21	21	21	21	21	21	21	21	21	21	21	21	21	22	22	22	22	22	22
29.5	21	21	21	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
29	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
28.5	22	22	22	22	22	22	22	22	22	22	23	23	23	23	23	23	23	23	23	23
28	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
27.5	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	24	24
27	23	23	23	23	23	23	23	24	24	24	24	24	24	24	24	24	24	24	24	24
26.5	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
26	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	25	25	25	25	25
25.5	24	24	24	24	24	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
24.5	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	26	26	26	26	26
24	25	25	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
23.5	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	27
23	26	26	26	26	26	26	26	26	26	26	27	27	27	27	27	27	27	27	27	27
22.5	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27
22	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	28	28	28	28

**TABLE-2: Male BF% Estimation**  
**(Measurements needed: Height, Waist, and Weight)**

	Weight (lbs)																			
	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160
37.5	16	16	16	16	16	16	16	16	17	17	17	17	17	17	17	17	17	17	17	17
37	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
36.5	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	18	18	18	18	18
36	17	17	17	17	17	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
35.5	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
35	18	18	18	18	18	18	18	18	18	18	18	18	19	19	19	19	19	19	19	19
34.5	18	18	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
34	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	20
33.5	19	19	19	19	19	19	19	19	19	20	20	20	20	20	20	20	20	20	20	20
33	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
32.5	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	21	21	21
32	20	20	20	20	20	20	21	21	21	21	21	21	21	21	21	21	21	21	21	21
31.5	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
31	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	22	22	22	22	22
30.5	21	21	21	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
30	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
29.5	22	22	22	22	22	22	22	22	22	22	22	23	23	23	23	23	23	23	23	23
29	22	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
28.5	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	24	24
28	23	23	23	23	23	23	23	23	24	24	24	24	24	24	24	24	24	24	24	24
27.5	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
27	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	25	25	25	25	25
26.5	24	24	24	24	24	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
26	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
25.5	25	25	25	25	25	25	25	25	25	25	25	25	26	26	26	26	26	26	26	26
25	25	25	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
24.5	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	27
24	26	26	26	26	26	26	26	26	26	27	27	27	27	27	27	27	27	27	27	27
23.5	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27
23	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	28	28	28

**TABLE-2: Male BF% Estimation**  
**(Measurements needed: Height, Waist, and Weight)**

	Weight (lbs)																			
	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180
38.5	16	16	16	16	16	16	16	16	17	17	17	17	17	17	17	17	17	17	17	17
38	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
37.5	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	18	18	18	18	18
37	17	17	17	17	17	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
36.5	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
36	18	18	18	18	18	18	18	18	18	18	18	18	19	19	19	19	19	19	19	19
35.5	18	18	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
35	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	20
34.5	19	19	19	19	19	19	19	19	19	20	20	20	20	20	20	20	20	20	20	20
34	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
33.5	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	21	21	21
33	20	20	20	20	20	20	21	21	21	21	21	21	21	21	21	21	21	21	21	21
32.5	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
32	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	22	22	22	22	22
31.5	21	21	21	21	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
31	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
30.5	22	22	22	22	22	22	22	22	22	22	22	23	23	23	23	23	23	23	23	23
30	22	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
29.5	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	24	24
29	23	23	23	23	23	23	23	23	24	24	24	24	24	24	24	24	24	24	24	24
28.5	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
28	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	25	25	25	25	25
27.5	24	24	24	24	24	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
27	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
26.5	25	25	25	25	25	25	25	25	25	25	25	25	26	26	26	26	26	26	26	26
26	25	25	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
25.5	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
25	26	26	26	26	26	26	26	26	26	26	27	27	27	27	27	27	27	27	27	27
24.5	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27
24	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	28	28	28

**TABLE-2: Male BF% Estimation**  
**(Measurements needed: Height, Waist, and Weight)**

	Weight (lbs)																			
	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200
39.5	16	16	16	16	16	16	16	16	17	17	17	17	17	17	17	17	17	17	17	17
39	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
38.5	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	18	18	18	18	18
38	17	17	17	17	17	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
37.5	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
37	18	18	18	18	18	18	18	18	18	18	18	18	19	19	19	19	19	19	19	19
36.5	18	18	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
36	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
35.5	19	19	19	19	19	19	19	19	19	19	20	20	20	20	20	20	20	20	20	20
35	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
34.5	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	21	21	21
34	20	20	20	20	20	20	21	21	21	21	21	21	21	21	21	21	21	21	21	21
33.5	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
33	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	22	22	22	22	22
32.5	21	21	21	21	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
32	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
31.5	22	22	22	22	22	22	22	22	22	22	22	23	23	23	23	23	23	23	23	23
31	22	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
30.5	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	24
30	23	23	23	23	23	23	23	23	24	24	24	24	24	24	24	24	24	24	24	24
29.5	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
29	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	25	25	25	25	25
28.5	24	24	24	24	24	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
28	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
27.5	25	25	25	25	25	25	25	25	25	25	25	25	25	26	26	26	26	26	26	26
27	25	25	25	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
26.5	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
26	26	26	26	26	26	26	26	26	26	26	27	27	27	27	27	27	27	27	27	27
25.5	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27
25	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	28	28	28

**TABLE-2: Male BF% Estimation**  
**(Measurements needed: Height, Waist, and Weight)**

	Weight (lbs)																			
	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220
40.5	16	16	16	16	16	16	16	16	17	17	17	17	17	17	17	17	17	17	17	17
40	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
39.5	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	18	18	18	18	18
39	17	17	17	17	17	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
38.5	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
38	18	18	18	18	18	18	18	18	18	18	18	18	18	19	19	19	19	19	19	19
37.5	18	18	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
37	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
36.5	19	19	19	19	19	19	19	19	19	19	20	20	20	20	20	20	20	20	20	20
36	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
35.5	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	21	21	21
35	20	20	20	20	20	20	20	21	21	21	21	21	21	21	21	21	21	21	21	21
34.5	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
34	21	21	21	21	21	21	21	21	21	21	21	21	21	21	22	22	22	22	22	22
33.5	21	21	21	21	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
33	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
32.5	22	22	22	22	22	22	22	22	22	22	23	23	23	23	23	23	23	23	23	23
32	22	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
31.5	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	24	24
31	23	23	23	23	23	23	23	23	24	24	24	24	24	24	24	24	24	24	24	24
30.5	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
30	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	25	25	25	25
29.5	24	24	24	24	24	24	25	25	25	25	25	25	25	25	25	25	25	25	25	25
29	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
28.5	25	25	25	25	25	25	25	25	25	25	25	25	25	25	26	26	26	26	26	26
28	25	25	25	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
27.5	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
27	26	26	26	26	26	26	26	26	26	26	27	27	27	27	27	27	27	27	27	27
26.5	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27
26	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	28	28	28

**TABLE-2: Male BF% Estimation**  
**(Measurements needed: Height, Waist, and Weight)**

	Weight (lbs)																			
	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240
41.5	16	16	16	16	16	16	16	16	17	17	17	17	17	17	17	17	17	17	17	17
41	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
40.5	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	18	18	18	18
40	17	17	17	17	17	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
39.5	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
39	18	18	18	18	18	18	18	18	18	18	18	18	18	19	19	19	19	19	19	19
38.5	18	18	18	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
38	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
37.5	19	19	19	19	19	19	19	19	19	19	19	20	20	20	20	20	20	20	20	20
37	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
36.5	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	21	21	21
36	20	20	20	20	20	20	20	21	21	21	21	21	21	21	21	21	21	21	21	21
35.5	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
35	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	22	22	22	22	22
34.5	21	21	21	21	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
34	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
33.5	22	22	22	22	22	22	22	22	22	22	22	23	23	23	23	23	23	23	23	23
33	22	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
32.5	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	24
32	23	23	23	23	23	23	23	23	23	24	24	24	24	24	24	24	24	24	24	24
31.5	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
31	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	25	25	25	25
30.5	24	24	24	24	24	24	25	25	25	25	25	25	25	25	25	25	25	25	25	25
30	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
29.5	25	25	25	25	25	25	25	25	25	25	25	25	25	25	26	26	26	26	26	26
29	25	25	25	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
28.5	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
28	26	26	26	26	26	26	26	26	26	26	27	27	27	27	27	27	27	27	27	27
27.5	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27
27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	28	28	28

**TABLE-2: Male BF% Estimation**  
**(Measurements needed: Height, Waist, and Weight)**

	Weight (lbs)																			
	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260
42.5	16	16	16	16	16	16	16	16	16	17	17	17	17	17	17	17	17	17	17	17
42	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
41.5	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	18	18	18	18
41	17	17	17	17	17	17	18	18	18	18	18	18	18	18	18	18	18	18	18	18
40.5	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
40	18	18	18	18	18	18	18	18	18	18	18	18	18	19	19	19	19	19	19	19
39.5	18	18	18	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
39	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
38.5	19	19	19	19	19	19	19	19	19	19	20	20	20	20	20	20	20	20	20	20
38	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
37.5	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	21	21	21
37	20	20	20	20	20	20	21	21	21	21	21	21	21	21	21	21	21	21	21	21
36.5	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
36	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	22	22	22	22	22
35.5	21	21	21	21	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
35	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
34.5	22	22	22	22	22	22	22	22	22	22	22	22	23	23	23	23	23	23	23	23
34	22	22	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
33.5	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	24
33	23	23	23	23	23	23	23	23	23	24	24	24	24	24	24	24	24	24	24	24
32.5	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
32	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	25	25	25
31.5	24	24	24	24	24	24	25	25	25	25	25	25	25	25	25	25	25	25	25	25
31	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
30.5	25	25	25	25	25	25	25	25	25	25	25	25	25	26	26	26	26	26	26	26
30	25	25	25	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
29.5	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
29	26	26	26	26	26	26	26	26	26	26	27	27	27	27	27	27	27	27	27	27
28.5	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27
28	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	28	28

**TABLE-2: Male BF% Estimation**  
**(Measurements needed: Height, Waist, and Weight)**

	Weight (lbs)																			
	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280
43.5	16	16	16	16	16	16	16	16	16	17	17	17	17	17	17	17	17	17	17	17
43	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
42.5	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	18	18	18
42	17	17	17	17	17	17	18	18	18	18	18	18	18	18	18	18	18	18	18	18
41.5	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
41	18	18	18	18	18	18	18	18	18	18	18	18	18	19	19	19	19	19	19	19
40.5	18	18	18	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
40	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
39.5	19	19	19	19	19	19	19	19	19	19	20	20	20	20	20	20	20	20	20	20
39	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
38.5	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	21	21
38	20	20	20	20	20	20	21	21	21	21	21	21	21	21	21	21	21	21	21	21
37.5	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
37	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	22	22	22	22
36.5	21	21	21	21	21	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
36	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
35.5	22	22	22	22	22	22	22	22	22	22	22	22	23	23	23	23	23	23	23	23
35	22	22	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
34.5	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	24
34	23	23	23	23	23	23	23	23	23	24	24	24	24	24	24	24	24	24	24	24
33.5	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
33	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	25	25	25	25
32.5	24	24	24	24	24	24	25	25	25	25	25	25	25	25	25	25	25	25	25	25
32	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
31.5	25	25	25	25	25	25	25	25	25	25	25	25	25	26	26	26	26	26	26	26
31	25	25	25	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
30.5	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
30	26	26	26	26	26	26	26	26	26	26	27	27	27	27	27	27	27	27	27	27
29.5	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27
29	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	28	28	28

**TABLE-2: Male BF% Estimation**  
**(Measurements needed: Height, Waist, and Weight)**

	Weight (lbs)																			
	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300
44.5	16	16	16	16	16	16	16	16	16	17	17	17	17	17	17	17	17	17	17	17
44	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
43.5	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	18	18	18	18
43	17	17	17	17	17	17	18	18	18	18	18	18	18	18	18	18	18	18	18	18
42.5	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
42	18	18	18	18	18	18	18	18	18	18	18	18	18	19	19	19	19	19	19	19
41.5	18	18	18	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
41	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
40.5	19	19	19	19	19	19	19	19	19	19	20	20	20	20	20	20	20	20	20	20
40	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
39.5	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	21	21
39	20	20	20	20	20	20	20	20	21	21	21	21	21	21	21	21	21	21	21	21
38.5	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
38	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	22	22	22	22
37.5	21	21	21	21	21	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
37	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
36.5	22	22	22	22	22	22	22	22	22	22	22	22	23	23	23	23	23	23	23	23
36	22	22	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
35.5	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	24
35	23	23	23	23	23	23	23	23	23	24	24	24	24	24	24	24	24	24	24	24
34.5	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
34	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	25	25	25	25
33.5	24	24	24	24	24	24	25	25	25	25	25	25	25	25	25	25	25	25	25	25
33	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
32.5	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	26	26	26	26	26
32	25	25	25	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
31.5	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
31	26	26	26	26	26	26	26	26	26	26	26	27	27	27	27	27	27	27	27	27
30.5	26	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27
30	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	28	28

**TABLE-2: Male BF% Estimation**  
**(Measurements needed: Height, Waist, and Weight)**

	Weight (lbs)																			
	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320
45.5	16	16	16	16	16	16	16	16	16	17	17	17	17	17	17	17	17	17	17	17
45	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
44.5	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	18	18	18	18
44	17	17	17	17	17	17	18	18	18	18	18	18	18	18	18	18	18	18	18	18
43.5	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
43	18	18	18	18	18	18	18	18	18	18	18	18	18	18	19	19	19	19	19	19
42.5	18	18	18	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
42	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
41.5	19	19	19	19	19	19	19	19	19	19	19	20	20	20	20	20	20	20	20	20
41	19	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
40.5	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	21	21
40	20	20	20	20	20	20	20	20	21	21	21	21	21	21	21	21	21	21	21	21
39.5	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
39	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	22	22	22	22
38.5	21	21	21	21	21	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
38	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
37.5	22	22	22	22	22	22	22	22	22	22	22	22	23	23	23	23	23	23	23	23
37	22	22	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
36.5	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	24
36	23	23	23	23	23	23	23	23	23	24	24	24	24	24	24	24	24	24	24	24
35.5	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
35	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	25	25
34.5	24	24	24	24	24	24	24	25	25	25	25	25	25	25	25	25	25	25	25	25
34	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
33.5	25	25	25	25	25	25	25	25	25	25	25	25	25	25	26	26	26	26	26	26
33	25	25	25	25	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
32.5	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
32	26	26	26	26	26	26	26	26	26	26	26	27	27	27	27	27	27	27	27	27
31.5	26	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27
31	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	28	28

**TABLE-2: Male BF% Estimation**  
**(Measurements needed: Height, Waist, and Weight)**

	Weight (lbs)																			
	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340
46.5	16	16	16	16	16	16	16	16	16	17	17	17	17	17	17	17	17	17	17	17
46	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
45.5	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	18	18	18
45	17	17	17	17	17	17	18	18	18	18	18	18	18	18	18	18	18	18	18	18
44.5	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
44	18	18	18	18	18	18	18	18	18	18	18	18	18	18	19	19	19	19	19	19
43.5	18	18	18	18	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
43	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
42.5	19	19	19	19	19	19	19	19	19	19	19	19	20	20	20	20	20	20	20	20
42	19	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
41.5	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	21	21
41	20	20	20	20	20	20	20	20	21	21	21	21	21	21	21	21	21	21	21	21
40.5	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
40	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	22	22	22	22
39.5	21	21	21	21	21	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
39	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
38.5	22	22	22	22	22	22	22	22	22	22	22	22	22	23	23	23	23	23	23	23
38	22	22	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
37.5	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
37	23	23	23	23	23	23	23	23	23	23	24	24	24	24	24	24	24	24	24	24
36.5	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
36	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	25	25	25
35.5	24	24	24	24	24	24	24	25	25	25	25	25	25	25	25	25	25	25	25	25
35	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
34.5	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	26	26	26	26	26
34	25	25	25	25	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
33.5	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
33	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
32.5	26	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27
32	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	28	28

**TABLE-2: Male BF% Estimation**  
**(Measurements needed: Height, Waist, and Weight)**

	Weight (lbs)																			
	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360
47.5	16	16	16	16	16	16	16	16	16	17	17	17	17	17	17	17	17	17	17	17
47	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
46.5	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	18	18	18
46	17	17	17	17	17	17	17	18	18	18	18	18	18	18	18	18	18	18	18	18
45.5	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
45	18	18	18	18	18	18	18	18	18	18	18	18	18	18	19	19	19	19	19	19
44.5	18	18	18	18	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
44	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
43.5	19	19	19	19	19	19	19	19	19	19	19	20	20	20	20	20	20	20	20	20
43	19	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
42.5	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	21	21
42	20	20	20	20	20	20	20	20	21	21	21	21	21	21	21	21	21	21	21	21
41.5	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
41	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	22	22	22	22
40.5	21	21	21	21	21	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
40	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
39.5	22	22	22	22	22	22	22	22	22	22	22	22	22	23	23	23	23	23	23	23
39	22	22	22	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
38.5	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
38	23	23	23	23	23	23	23	23	23	23	24	24	24	24	24	24	24	24	24	24
37.5	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
37	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	25	25
36.5	24	24	24	24	24	24	24	25	25	25	25	25	25	25	25	25	25	25	25	25
36	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
35.5	25	25	25	25	25	25	25	25	25	25	25	25	25	25	26	26	26	26	26	26
35	25	25	25	25	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
34.5	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
34	26	26	26	26	26	26	26	26	26	26	26	27	27	27	27	27	27	27	27	27
33.5	26	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27
33	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	28

**TABLE-2: Male BF% Estimation**  
**(Measurements needed: Height, Waist, and Weight)**

	Weight (lbs)																			
	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380
48.5	16	16	16	16	16	16	16	16	16	16	17	17	17	17	17	17	17	17	17	17
48	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
47.5	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	18	18	18
47	17	17	17	17	17	17	17	18	18	18	18	18	18	18	18	18	18	18	18	18
46.5	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
46	18	18	18	18	18	18	18	18	18	18	18	18	18	18	19	19	19	19	19	19
45.5	18	18	18	18	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
45	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
44.5	19	19	19	19	19	19	19	19	19	19	19	20	20	20	20	20	20	20	20	20
44	19	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
43.5	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	21	21
43	20	20	20	20	20	20	20	20	21	21	21	21	21	21	21	21	21	21	21	21
42.5	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
42	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	22	22	22
41.5	21	21	21	21	21	21	22	22	22	22	22	22	22	22	22	22	22	22	22	22
41	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
40.5	22	22	22	22	22	22	22	22	22	22	22	22	22	23	23	23	23	23	23	23
40	22	22	22	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
39.5	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
39	23	23	23	23	23	23	23	23	23	23	24	24	24	24	24	24	24	24	24	24
38.5	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
38	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	25	25
37.5	24	24	24	24	24	24	24	25	25	25	25	25	25	25	25	25	25	25	25	25
37	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
36.5	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	26	26	26	26	26
36	25	25	25	25	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
35.5	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
35	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
34.5	26	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27
34	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	28

**TABLE-3: Female BF% Estimation**  
**(Measurements needed: Height, Waist, and Weight)**

Height-Waist Difference (Height - Waist, inches)	Weight (lbs)																			
	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
31.5	24	24	24	24	24	24	24	24	24	24	24	25	25	25	25	25	25	25	25	25
31	24	24	24	24	24	24	24	24	25	25	25	25	25	25	25	25	25	25	25	25
30.5	24	24	24	24	24	25	25	25	25	25	25	25	25	25	25	25	25	26	26	26
30	24	25	25	25	25	25	25	25	25	25	25	25	25	26	26	26	26	26	26	26
29.5	25	25	25	25	25	25	25	25	25	26	26	26	26	26	26	26	26	26	26	26
29	25	25	25	25	25	25	26	26	26	26	26	26	26	26	26	26	26	27	27	27
28.5	25	25	26	26	26	26	26	26	26	26	26	26	26	26	27	27	27	27	27	27
28	26	26	26	26	26	26	26	26	26	26	27	27	27	27	27	27	27	27	27	27
27.5	26	26	26	26	26	27	27	27	27	27	27	27	27	27	27	27	27	27	28	28
27	26	26	26	27	27	27	27	27	27	27	27	27	27	27	27	28	28	28	28	28
26.5	27	27	27	27	27	27	27	27	27	27	27	28	28	28	28	28	28	28	28	28
26	27	27	27	27	27	27	27	28	28	28	28	28	28	28	28	28	28	28	28	29
25.5	27	27	27	27	28	28	28	28	28	28	28	28	28	28	28	28	29	29	29	29
25	28	28	28	28	28	28	28	28	28	28	28	29	29	29	29	29	29	29	29	29
24.5	28	28	28	28	28	28	28	28	29	29	29	29	29	29	29	29	29	29	29	29
24	28	28	28	28	28	29	29	29	29	29	29	29	29	29	29	30	30	30	30	30
23.5	28	29	29	29	29	29	29	29	29	29	29	29	30	30	30	30	30	30	30	30
23	29	29	29	29	29	29	29	29	29	30	30	30	30	30	30	30	30	30	30	30
22.5	29	29	29	29	29	30	30	30	30	30	30	30	30	30	30	30	30	31	31	31
22	29	29	30	30	30	30	30	30	30	30	30	30	30	31	31	31	31	31	31	31
21.5	30	30	30	30	30	30	30	30	30	30	31	31	31	31	31	31	31	31	31	31
21	30	30	30	30	30	30	31	31	31	31	31	31	31	31	31	31	31	31	32	32
20.5	30	30	30	31	31	31	31	31	31	31	31	31	31	31	31	32	32	32	32	32
20	31	31	31	31	31	31	31	31	31	31	31	32	32	32	32	32	32	32	32	32
19.5	31	31	31	31	31	31	31	32	32	32	32	32	32	32	32	32	32	32	32	33
19	31	31	31	32	32	32	32	32	32	32	32	32	32	32	32	33	33	33	33	33
18.5	32	32	32	32	32	32	32	32	32	32	32	33	33	33	33	33	33	33	33	33
18	32	32	32	32	32	32	32	32	32	33	33	33	33	33	33	33	33	33	33	33
17.5	32	32	32	32	33	33	33	33	33	33	33	33	33	33	33	33	34	34	34	34
17	32	33	33	33	33	33	33	33	33	33	33	33	34	34	34	34	34	34	34	34
16.5	33	33	33	33	33	33	33	33	33	34	34	34	34	34	34	34	34	34	34	34
16	33	33	33	33	33	34	34	34	34	34	34	34	34	34	34	34	34	34	35	35
15.5	33	34	34	34	34	34	34	34	34	34	34	34	35	35	35	35	35	35	35	35
15	34	34	34	34	34	34	34	34	34	34	34	35	35	35	35	35	35	35	35	35
14.5	34	34	34	34	34	34	35	35	35	35	35	35	35	35	35	35	35	35	36	36
14	34	34	35	35	35	35	35	35	35	35	35	35	35	35	35	36	36	36	36	36
13.5	35	35	35	35	35	35	35	35	35	35	35	36	36	36	36	36	36	36	36	36
13	35	35	35	35	35	35	36	36	36	36	36	36	36	36	36	36	36	36	37	37
12.5	35	35	35	36	36	36	36	36	36	36	36	36	36	36	36	36	37	37	37	37
12	36	36	36	36	36	36	36	36	36	36	36	36	37	37	37	37	37	37	37	37
11.5	36	36	36	36	36	36	36	36	37	37	37	37	37	37	37	37	37	37	37	38
11	36	36	36	36	37	37	37	37	37	37	37	37	37	37	37	37	37	38	38	38
10.5	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	38	38	38	38	38

**TABLE-3: Female BF% Estimation**  
**(Measurements needed: Height, Waist, and Weight)**

Height-Waist Difference (Height - Waist, inches)	Weight (lbs)																			
	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
34	24	24	24	24	24	24	24	24	24	24	25	25	25	25	25	25	25	25	25	25
33.5	24	24	24	24	24	24	24	25	25	25	25	25	25	25	25	25	25	25	26	26
33	24	24	24	25	25	25	25	25	25	25	25	25	25	25	25	26	26	26	26	26
32.5	25	25	25	25	25	25	25	25	25	25	25	26	26	26	26	26	26	26	26	26
32	25	25	25	25	25	25	25	25	26	26	26	26	26	26	26	26	26	26	26	27
31.5	25	25	25	25	26	26	26	26	26	26	26	26	26	26	26	26	27	27	27	27
31	26	26	26	26	26	26	26	26	26	26	26	26	27	27	27	27	27	27	27	27
30.5	26	26	26	26	26	26	26	26	27	27	27	27	27	27	27	27	27	27	27	27
30	26	26	26	26	26	27	27	27	27	27	27	27	27	27	27	27	28	28	28	28
29.5	26	27	27	27	27	27	27	27	27	27	27	27	27	27	28	28	28	28	28	28
29	27	27	27	27	27	27	27	27	27	28	28	28	28	28	28	28	28	28	28	28
28.5	27	27	27	27	27	28	28	28	28	28	28	28	28	28	28	28	28	29	29	29
28	27	27	28	28	28	28	28	28	28	28	28	28	28	28	29	29	29	29	29	29
27.5	28	28	28	28	28	28	28	28	28	28	29	29	29	29	29	29	29	29	29	29
27	28	28	28	28	28	29	29	29	29	29	29	29	29	29	29	29	29	29	30	30
26.5	28	28	28	29	29	29	29	29	29	29	29	29	29	29	29	30	30	30	30	30
26	29	29	29	29	29	29	29	29	29	29	30	30	30	30	30	30	30	30	30	30
25.5	29	29	29	29	29	29	30	30	30	30	30	30	30	30	30	30	30	30	30	31
25	29	29	29	29	30	30	30	30	30	30	30	30	30	30	30	31	31	31	31	31
24.5	30	30	30	30	30	30	30	30	30	30	30	31	31	31	31	31	31	31	31	31
24	30	30	30	30	30	30	30	30	31	31	31	31	31	31	31	31	31	31	31	31
23.5	30	30	30	30	31	31	31	31	31	31	31	31	31	31	31	31	32	32	32	32
23	30	31	31	31	31	31	31	31	31	31	31	31	31	31	32	32	32	32	32	32
22.5	31	31	31	31	31	31	31	31	31	32	32	32	32	32	32	32	32	32	32	32
22	31	31	31	31	31	32	32	32	32	32	32	32	32	32	32	32	32	33	33	33
21.5	31	31	32	32	32	32	32	32	32	32	32	32	32	32	33	33	33	33	33	33
21	32	32	32	32	32	32	32	32	32	33	33	33	33	33	33	33	33	33	33	33
20.5	32	32	32	32	32	33	33	33	33	33	33	33	33	33	33	33	33	33	33	34
20	32	32	33	33	33	33	33	33	33	33	33	33	33	33	33	34	34	34	34	34
19.5	33	33	33	33	33	33	33	33	33	33	33	33	34	34	34	34	34	34	34	34
19	33	33	33	33	33	33	33	34	34	34	34	34	34	34	34	34	34	34	34	35
18.5	33	33	33	34	34	34	34	34	34	34	34	34	34	34	34	34	35	35	35	35
18	34	34	34	34	34	34	34	34	34	34	34	35	35	35	35	35	35	35	35	35
17.5	34	34	34	34	34	34	34	34	35	35	35	35	35	35	35	35	35	35	35	35
17	34	34	34	34	35	35	35	35	35	35	35	35	35	35	35	35	36	36	36	36
16.5	35	35	35	35	35	35	35	35	35	35	35	35	35	36	36	36	36	36	36	36
16	35	35	35	35	35	35	35	35	35	36	36	36	36	36	36	36	36	36	36	36
15.5	35	35	35	35	35	36	36	36	36	36	36	36	36	36	36	36	36	37	37	37
15	35	36	36	36	36	36	36	36	36	36	36	36	36	36	37	37	37	37	37	37
14.5	36	36	36	36	36	36	36	36	36	36	36	37	37	37	37	37	37	37	37	37
14	36	36	36	36	36	36	37	37	37	37	37	37	37	37	37	37	37	37	38	38
13.5	36	36	37	37	37	37	37	37	37	37	37	37	37	37	37	38	38	38	38	38
13	37	37	37	37	37	37	37	37	37	37	37	37	38	38	38	38	38	38	38	38

**TABLE-3: Female BF% Estimation**  
**(Measurements needed: Height, Waist, and Weight)**

	Weight (lbs)																			
	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
36.5	24	24	24	24	24	24	24	24	24	25	25	25	25	25	25	25	25	25	25	25
36	24	24	24	24	24	25	25	25	25	25	25	25	25	25	25	25	25	26	26	26
35.5	24	25	25	25	25	25	25	25	25	25	25	25	25	26	26	26	26	26	26	26
35	25	25	25	25	25	25	25	25	25	26	26	26	26	26	26	26	26	26	26	26
34.5	25	25	25	25	25	25	26	26	26	26	26	26	26	26	26	26	26	26	27	27
34	25	25	26	26	26	26	26	26	26	26	26	26	26	26	27	27	27	27	27	27
33.5	26	26	26	26	26	26	26	26	26	26	27	27	27	27	27	27	27	27	27	27
33	26	26	26	26	26	26	27	27	27	27	27	27	27	27	27	27	27	27	28	28
32.5	26	26	26	27	27	27	27	27	27	27	27	27	27	27	27	27	28	28	28	28
32	27	27	27	27	27	27	27	27	27	27	27	27	28	28	28	28	28	28	28	28
31.5	27	27	27	27	27	27	27	28	28	28	28	28	28	28	28	28	28	28	28	29
31	27	27	27	27	28	28	28	28	28	28	28	28	28	28	28	29	29	29	29	29
30.5	28	28	28	28	28	28	28	28	28	28	28	28	29	29	29	29	29	29	29	29
30	28	28	28	28	28	28	28	28	29	29	29	29	29	29	29	29	29	29	29	29
29.5	28	28	28	28	28	29	29	29	29	29	29	29	29	29	29	29	29	30	30	30
29	28	29	29	29	29	29	29	29	29	29	29	29	29	30	30	30	30	30	30	30
28.5	29	29	29	29	29	29	29	29	29	30	30	30	30	30	30	30	30	30	30	30
28	29	29	29	29	30	30	30	30	30	30	30	30	30	30	30	30	31	31	31	31
27.5	29	29	30	30	30	30	30	30	30	30	30	30	30	30	31	31	31	31	31	31
27	30	30	30	30	30	30	30	30	30	31	31	31	31	31	31	31	31	31	31	31
26.5	30	30	30	30	30	31	31	31	31	31	31	31	31	31	31	31	31	31	32	32
26	30	30	30	31	31	31	31	31	31	31	31	31	31	31	32	32	32	32	32	32
25.5	31	31	31	31	31	31	31	31	31	31	31	32	32	32	32	32	32	32	32	32
25	31	31	31	31	31	31	31	32	32	32	32	32	32	32	32	32	32	32	32	33
24.5	31	31	31	32	32	32	32	32	32	32	32	32	32	32	32	33	33	33	33	33
24	32	32	32	32	32	32	32	32	32	32	32	32	32	33	33	33	33	33	33	33
23.5	32	32	32	32	32	32	32	32	33	33	33	33	33	33	33	33	33	33	33	33
23	32	32	32	32	33	33	33	33	33	33	33	33	33	33	33	33	33	34	34	34
22.5	32	33	33	33	33	33	33	33	33	33	33	33	33	34	34	34	34	34	34	34
22	33	33	33	33	33	33	33	33	33	34	34	34	34	34	34	34	34	34	34	34
21.5	33	33	33	33	33	34	34	34	34	34	34	34	34	34	34	34	34	35	35	35
21	33	34	34	34	34	34	34	34	34	34	34	34	34	34	35	35	35	35	35	35
20.5	34	34	34	34	34	34	34	34	34	34	34	35	35	35	35	35	35	35	35	35
20	34	34	34	34	34	34	35	35	35	35	35	35	35	35	35	35	35	35	35	36
19.5	34	34	35	35	35	35	35	35	35	35	35	35	35	35	35	36	36	36	36	36
19	35	35	35	35	35	35	35	35	35	35	35	36	36	36	36	36	36	36	36	36
18.5	35	35	35	35	35	35	35	36	36	36	36	36	36	36	36	36	36	36	36	37
18	35	35	35	35	36	36	36	36	36	36	36	36	36	36	36	37	37	37	37	37
17.5	36	36	36	36	36	36	36	36	36	36	36	36	36	37	37	37	37	37	37	37
17	36	36	36	36	36	36	36	36	36	37	37	37	37	37	37	37	37	37	37	38
16.5	36	36	36	36	37	37	37	37	37	37	37	37	37	37	37	37	38	38	38	38
16	37	37	37	37	37	37	37	37	37	37	37	37	38	38	38	38	38	38	38	38
15.5	37	37	37	37	37	37	37	37	37	38	38	38	38	38	38	38	38	38	38	38

**TABLE-3: Female BF% Estimation**  
**(Measurements needed: Height, Waist, and Weight)**

	Weight (lbs)																			
	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140
39.5	24	24	24	24	24	24	24	24	24	24	25	25	25	25	25	25	25	25	25	25
39	24	24	24	24	24	24	24	25	25	25	25	25	25	25	25	25	25	25	25	26
38.5	24	24	24	25	25	25	25	25	25	25	25	25	25	25	25	26	26	26	26	26
38	25	25	25	25	25	25	25	25	25	25	25	26	26	26	26	26	26	26	26	26
37.5	25	25	25	25	25	25	25	25	26	26	26	26	26	26	26	26	26	26	26	27
37	25	25	25	25	26	26	26	26	26	26	26	26	26	26	26	26	27	27	27	27
36.5	26	26	26	26	26	26	26	26	26	26	26	26	27	27	27	27	27	27	27	27
36	26	26	26	26	26	26	26	26	27	27	27	27	27	27	27	27	27	27	27	27
35.5	26	26	26	26	26	27	27	27	27	27	27	27	27	27	27	27	27	28	28	28
35	26	27	27	27	27	27	27	27	27	27	27	27	27	28	28	28	28	28	28	28
34.5	27	27	27	27	27	27	27	27	28	28	28	28	28	28	28	28	28	28	28	28
34	27	27	27	27	27	28	28	28	28	28	28	28	28	28	28	28	29	29	29	29
33.5	27	27	28	28	28	28	28	28	28	28	28	28	28	28	28	29	29	29	29	29
33	28	28	28	28	28	28	28	28	28	28	29	29	29	29	29	29	29	29	29	29
32.5	28	28	28	28	28	29	29	29	29	29	29	29	29	29	29	29	29	29	29	30
32	28	28	28	29	29	29	29	29	29	29	29	29	29	29	29	30	30	30	30	30
31.5	29	29	29	29	29	29	29	29	29	29	30	30	30	30	30	30	30	30	30	30
31	29	29	29	29	29	29	29	30	30	30	30	30	30	30	30	30	30	30	30	31
30.5	29	29	29	29	30	30	30	30	30	30	30	30	30	30	30	30	31	31	31	31
30	30	30	30	30	30	30	30	30	30	30	30	30	31	31	31	31	31	31	31	31
29.5	30	30	30	30	30	30	30	30	31	31	31	31	31	31	31	31	31	31	31	31
29	30	30	30	30	30	31	31	31	31	31	31	31	31	31	31	31	32	32	32	32
28.5	30	31	31	31	31	31	31	31	31	31	31	31	31	31	32	32	32	32	32	32
28	31	31	31	31	31	31	31	31	31	32	32	32	32	32	32	32	32	32	32	32
27.5	31	31	31	31	31	32	32	32	32	32	32	32	32	32	32	32	32	33	33	33
27	31	31	32	32	32	32	32	32	32	32	32	32	32	32	33	33	33	33	33	33
26.5	32	32	32	32	32	32	32	32	32	32	33	33	33	33	33	33	33	33	33	33
26	32	32	32	32	32	32	33	33	33	33	33	33	33	33	33	33	33	33	34	34
25.5	32	32	32	33	33	33	33	33	33	33	33	33	33	33	33	34	34	34	34	34
25	33	33	33	33	33	33	33	33	33	33	33	34	34	34	34	34	34	34	34	34
24.5	33	33	33	33	33	33	33	34	34	34	34	34	34	34	34	34	34	34	34	35
24	33	33	33	34	34	34	34	34	34	34	34	34	34	34	34	34	35	35	35	35
23.5	34	34	34	34	34	34	34	34	34	34	34	35	35	35	35	35	35	35	35	35
23	34	34	34	34	34	34	34	34	34	35	35	35	35	35	35	35	35	35	35	35
22.5	34	34	34	34	35	35	35	35	35	35	35	35	35	35	35	35	36	36	36	36
22	34	35	35	35	35	35	35	35	35	35	35	35	35	36	36	36	36	36	36	36
21.5	35	35	35	35	35	35	35	35	35	36	36	36	36	36	36	36	36	36	36	36
21	35	35	35	35	35	36	36	36	36	36	36	36	36	36	36	36	36	37	37	37
20.5	35	36	36	36	36	36	36	36	36	36	36	36	36	36	37	37	37	37	37	37
20	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	37	37	37
19.5	36	36	36	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	38	38
19	36	36	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	38	38
18.5	37	37	37	37	37	37	37	37	37	37	37	37	38	38	38	38	38	38	38	38

**TABLE-3: Female BF% Estimation**  
**(Measurements needed: Height, Waist, and Weight)**

Height-Waist Difference (Height - Waist, inches)	Weight (lbs)																			
	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160
42	24	24	24	24	24	24	24	24	25	25	25	25	25	25	25	25	25	25	25	25
41.5	24	24	24	24	24	25	25	25	25	25	25	25	25	25	25	25	25	26	26	26
41	24	25	25	25	25	25	25	25	25	25	25	25	25	26	26	26	26	26	26	26
40.5	25	25	25	25	25	25	25	25	25	25	25	26	26	26	26	26	26	26	26	26
40	25	25	25	25	25	25	26	26	26	26	26	26	26	26	26	26	26	26	27	27
39.5	25	25	26	26	26	26	26	26	26	26	26	26	26	26	27	27	27	27	27	27
39	26	26	26	26	26	26	26	26	26	26	27	27	27	27	27	27	27	27	27	27
38.5	26	26	26	26	26	26	27	27	27	27	27	27	27	27	27	27	27	27	28	28
38	26	26	26	27	27	27	27	27	27	27	27	27	27	27	27	28	28	28	28	28
37.5	27	27	27	27	27	27	27	27	27	27	27	28	28	28	28	28	28	28	28	28
37	27	27	27	27	27	27	27	27	28	28	28	28	28	28	28	28	28	28	28	29
36.5	27	27	27	27	28	28	28	28	28	28	28	28	28	28	28	28	28	29	29	29
36	28	28	28	28	28	28	28	28	28	28	28	28	29	29	29	29	29	29	29	29
35.5	28	28	28	28	28	28	28	28	29	29	29	29	29	29	29	29	29	29	29	29
35	28	28	28	28	28	29	29	29	29	29	29	29	29	29	29	29	30	30	30	30
34.5	28	29	29	29	29	29	29	29	29	29	29	29	29	30	30	30	30	30	30	30
34	29	29	29	29	29	29	29	29	29	30	30	30	30	30	30	30	30	30	30	30
33.5	29	29	29	29	29	29	30	30	30	30	30	30	30	30	30	30	30	31	31	31
33	29	29	30	30	30	30	30	30	30	30	30	30	30	30	31	31	31	31	31	31
32.5	30	30	30	30	30	30	30	30	30	30	31	31	31	31	31	31	31	31	31	31
32	30	30	30	30	30	30	31	31	31	31	31	31	31	31	31	31	31	31	32	32
31.5	30	30	30	31	31	31	31	31	31	31	31	31	31	31	31	31	32	32	32	32
31	31	31	31	31	31	31	31	31	31	31	31	31	31	32	32	32	32	32	32	32
30.5	31	31	31	31	31	31	31	32	32	32	32	32	32	32	32	32	32	32	32	33
30	31	31	31	31	32	32	32	32	32	32	32	32	32	32	32	32	33	33	33	33
29.5	32	32	32	32	32	32	32	32	32	32	32	32	32	33	33	33	33	33	33	33
29	32	32	32	32	32	32	32	32	33	33	33	33	33	33	33	33	33	33	33	33
28.5	32	32	32	32	33	33	33	33	33	33	33	33	33	33	33	33	34	34	34	34
28	32	33	33	33	33	33	33	33	33	33	33	33	33	34	34	34	34	34	34	34
27.5	33	33	33	33	33	33	33	33	34	34	34	34	34	34	34	34	34	34	34	34
27	33	33	33	33	33	34	34	34	34	34	34	34	34	34	34	34	34	35	35	35
26.5	33	33	34	34	34	34	34	34	34	34	34	34	34	34	35	35	35	35	35	35
26	34	34	34	34	34	34	34	34	34	34	34	35	35	35	35	35	35	35	35	35
25.5	34	34	34	34	34	34	35	35	35	35	35	35	35	35	35	35	35	35	36	36
25	34	34	35	35	35	35	35	35	35	35	35	35	35	35	36	36	36	36	36	36
24.5	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
24	35	35	35	35	35	35	35	36	36	36	36	36	36	36	36	36	36	36	36	36
23.5	35	35	35	36	36	36	36	36	36	36	36	36	36	36	36	36	37	37	37	37
23	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	37	37	37
22.5	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
22	36	36	36	36	36	37	37	37	37	37	37	37	37	37	37	37	37	38	38	38
21.5	37	37	37	37	37	37	37	37	37	37	37	37	37	37	38	38	38	38	38	38

**TABLE-3: Female BF% Estimation**  
**(Measurements needed: Height, Waist, and Weight)**

Height-Waist Difference (Height - Waist, inches)	Weight (lbs)																			
	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180
45	24	24	24	24	24	24	24	24	24	24	24	25	25	25	25	25	25	25	25	25
44.5	24	24	24	24	24	24	24	25	25	25	25	25	25	25	25	25	25	25	25	26
44	24	24	24	25	25	25	25	25	25	25	25	25	25	25	25	26	26	26	26	26
43.5	25	25	25	25	25	25	25	25	25	25	25	26	26	26	26	26	26	26	26	26
43	25	25	25	25	25	25	25	25	26	26	26	26	26	26	26	26	26	26	26	26
42.5	25	25	25	25	26	26	26	26	26	26	26	26	26	26	26	26	26	27	27	27
42	26	26	26	26	26	26	26	26	26	26	26	26	27	27	27	27	27	27	27	27
41.5	26	26	26	26	26	26	27	27	27	27	27	27	27	27	27	27	27	27	27	27
41	26	26	26	26	27	27	27	27	27	27	27	27	27	27	27	27	27	28	28	28
40.5	26	27	27	27	27	27	27	27	27	27	27	27	27	27	28	28	28	28	28	28
40	27	27	27	27	27	27	27	27	27	28	28	28	28	28	28	28	28	28	28	28
39.5	27	27	27	27	27	27	28	28	28	28	28	28	28	28	28	28	28	28	29	29
39	27	27	28	28	28	28	28	28	28	28	28	28	28	28	29	29	29	29	29	29
38.5	28	28	28	28	28	28	28	28	28	28	29	29	29	29	29	29	29	29	29	29
38	28	28	28	28	28	28	28	29	29	29	29	29	29	29	29	29	29	29	30	30
37.5	28	28	28	29	29	29	29	29	29	29	29	29	29	29	29	29	30	30	30	30
37	29	29	29	29	29	29	29	29	29	29	29	30	30	30	30	30	30	30	30	30
36.5	29	29	29	29	29	29	30	30	30	30	30	30	30	30	30	30	30	30	30	31
36	29	29	29	29	30	30	30	30	30	30	30	30	30	30	30	30	31	31	31	31
35.5	30	30	30	30	30	30	30	30	30	30	30	30	31	31	31	31	31	31	31	31
35	30	30	30	30	30	30	30	30	31	31	31	31	31	31	31	31	31	31	31	31
34.5	30	30	30	30	30	31	31	31	31	31	31	31	31	31	31	31	32	32	32	32
34	30	31	31	31	31	31	31	31	31	31	31	31	31	31	31	32	32	32	32	32
33.5	31	31	31	31	31	31	31	31	31	32	32	32	32	32	32	32	32	32	32	32
33	31	31	31	31	31	32	32	32	32	32	32	32	32	32	32	32	32	33	33	33
32.5	31	31	32	32	32	32	32	32	32	32	32	32	32	32	32	32	33	33	33	33
32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	33	33	33	33	33
31.5	32	32	32	32	32	32	33	33	33	33	33	33	33	33	33	33	33	33	34	34
31	32	32	32	33	33	33	33	33	33	33	33	33	33	33	33	34	34	34	34	34
30.5	33	33	33	33	33	33	33	33	33	33	33	34	34	34	34	34	34	34	34	34
30	33	33	33	33	33	33	33	34	34	34	34	34	34	34	34	34	34	34	34	35
29.5	33	33	33	34	34	34	34	34	34	34	34	34	34	34	34	34	35	35	35	35
29	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34
28.5	34	34	34	34	34	34	34	34	35	35	35	35	35	35	35	35	35	35	35	35
28	34	34	34	34	35	35	35	35	35	35	35	35	35	35	35	35	36	36	36	36
27.5	34	35	35	35	35	35	35	35	35	35	35	35	35	36	36	36	36	36	36	36
27	35	35	35	35	35	35	35	35	35	36	36	36	36	36	36	36	36	36	36	36
26.5	35	35	35	35	36	36	36	36	36	36	36	36	36	36	36	36	36	37	37	37
26	35	36	36	36	36	36	36	36	36	36	36	36	36	36	36	37	37	37	37	37
25.5	36	36	36	36	36	36	36	37	37	37	37	37	37	37	37	37	37	37	37	37
25	36	36	36	36	36	36	37	37	37	37	37	37	37	37	37	37	37	37	38	38
24.5	36	36	37	37	37	37	37	37	37	37	37	37	37	37	37	38	38	38	38	38
24	37	37	37	37	37	37	37	37	37	37	37	37	37	38	38	38	38	38	38	38

**TABLE-3: Female BF% Estimation**  
**(Measurements needed: Height, Waist, and Weight)**

	Weight (lbs)																			
	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200
47.5	24	24	24	24	24	24	24	24	24	25	25	25	25	25	25	25	25	25	25	25
47	24	24	24	24	24	25	25	25	25	25	25	25	25	25	25	25	25	26	26	26
46.5	24	25	25	25	25	25	25	25	25	25	25	25	25	26	26	26	26	26	26	26
46	25	25	25	25	25	25	25	25	25	25	26	26	26	26	26	26	26	26	26	26
45.5	25	25	25	25	25	25	26	26	26	26	26	26	26	26	26	26	26	26	27	27
45	25	25	26	26	26	26	26	26	26	26	26	26	26	26	27	27	27	27	27	27
44.5	26	26	26	26	26	26	26	26	26	26	27	27	27	27	27	27	27	27	27	27
44	26	26	26	26	26	26	26	27	27	27	27	27	27	27	27	27	27	27	27	28
43.5	26	26	26	27	27	27	27	27	27	27	27	27	27	27	27	27	28	28	28	28
43	27	27	27	27	27	27	27	27	27	27	27	27	28	28	28	28	28	28	28	28
42.5	27	27	27	27	27	27	27	27	28	28	28	28	28	28	28	28	28	28	28	29
42	27	27	27	27	28	28	28	28	28	28	28	28	28	28	28	28	29	29	29	29
41.5	28	28	28	28	28	28	28	28	28	28	28	29	29	29	29	29	29	29	29	29
41	28	28	28	28	28	28	28	28	29	29	29	29	29	29	29	29	29	29	29	29
40.5	28	28	28	28	29	29	29	29	29	29	29	29	29	29	29	29	29	30	30	30
40	28	29	29	29	29	29	29	29	29	29	29	29	29	30	30	30	30	30	30	30
39.5	29	29	29	29	29	29	29	29	29	30	30	30	30	30	30	30	30	30	30	30
39	29	29	29	29	29	29	30	30	30	30	30	30	30	30	30	30	30	31	31	31
38.5	29	29	30	30	30	30	30	30	30	30	30	30	30	30	30	31	31	31	31	31
38	30	30	30	30	30	30	30	30	30	31	31	31	31	31	31	31	31	31	31	31
37.5	30	30	30	30	30	30	31	31	31	31	31	31	31	31	31	31	31	31	32	32
37	30	30	30	31	31	31	31	31	31	31	31	31	31	31	31	31	32	32	32	32
36.5	31	31	31	31	31	31	31	31	31	31	31	32	32	32	32	32	32	32	32	32
36	31	31	31	31	31	31	31	32	32	32	32	32	32	32	32	32	32	32	32	33
35.5	31	31	31	31	32	32	32	32	32	32	32	32	32	32	32	32	33	33	33	33
35	32	32	32	32	32	32	32	32	32	32	32	32	33	33	33	33	33	33	33	33
34.5	32	32	32	32	32	32	32	32	33	33	33	33	33	33	33	33	33	33	33	33
34	32	32	32	32	32	33	33	33	33	33	33	33	33	33	33	33	34	34	34	34
33.5	32	33	33	33	33	33	33	33	33	33	33	33	33	34	34	34	34	34	34	34
33	33	33	33	33	33	33	33	33	33	34	34	34	34	34	34	34	34	34	34	34
32.5	33	33	33	33	33	34	34	34	34	34	34	34	34	34	34	34	34	35	35	35
32	33	33	34	34	34	34	34	34	34	34	34	34	34	34	35	35	35	35	35	35
31.5	34	34	34	34	34	34	34	34	34	34	35	35	35	35	35	35	35	35	35	35
31	34	34	34	34	34	34	35	35	35	35	35	35	35	35	35	35	35	35	36	36
30.5	34	34	34	35	35	35	35	35	35	35	35	35	35	35	35	36	36	36	36	36
30	35	35	35	35	35	35	35	35	35	35	35	36	36	36	36	36	36	36	36	36
29.5	35	35	35	35	35	35	35	36	36	36	36	36	36	36	36	36	36	36	36	37
29	35	35	35	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	37
28.5	36	36	36	36	36	36	36	36	36	36	36	36	36	37	37	37	37	37	37	37
28	36	36	36	36	36	36	36	36	36	37	37	37	37	37	37	37	37	37	37	37
27.5	36	36	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	38	38	38
27	36	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37
26.5	37	37	37	37	37	37	37	37	37	37	37	38	38	38	38	38	38	38	38	38

**TABLE-3: Female BF% Estimation**  
**(Measurements needed: Height, Waist, and Weight)**

	Weight (lbs)																			
	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220
50.5	24	24	24	24	24	24	24	24	24	24	24	25	25	25	25	25	25	25	25	25
50	24	24	24	24	24	24	24	25	25	25	25	25	25	25	25	25	25	25	25	26
49.5	24	24	24	25	25	25	25	25	25	25	25	25	25	25	25	25	26	26	26	26
49	25	25	25	25	25	25	25	25	25	25	25	26	26	26	26	26	26	26	26	26
48.5	25	25	25	25	25	25	25	25	26	26	26	26	26	26	26	26	26	26	26	26
48	25	25	25	25	26	26	26	26	26	26	26	26	26	26	26	26	26	27	27	27
47.5	25	26	26	26	26	26	26	26	26	26	26	26	26	27	27	27	27	27	27	27
47	26	26	26	26	26	26	26	26	26	27	27	27	27	27	27	27	27	27	27	27
46.5	26	26	26	26	27	27	27	27	27	27	27	27	27	27	27	27	27	27	28	28
46	26	27	27	27	27	27	27	27	27	27	27	27	27	28	28	28	28	28	28	28
45.5	27	27	27	27	27	27	27	27	27	27	27	28	28	28	28	28	28	28	28	28
45	27	27	27	27	27	27	28	28	28	28	28	28	28	28	28	28	28	28	29	29
44.5	27	27	28	28	28	28	28	28	28	28	28	28	28	28	29	29	29	29	29	29
44	28	28	28	28	28	28	28	28	28	29	29	29	29	29	29	29	29	29	29	29
43.5	28	28	28	28	28	28	28	29	29	29	29	29	29	29	29	29	29	29	30	30
43	28	28	28	29	29	29	29	29	29	29	29	29	29	29	29	30	30	30	30	30
42.5	29	29	29	29	29	29	29	29	29	29	29	30	30	30	30	30	30	30	30	30
42	29	29	29	29	29	29	29	29	30	30	30	30	30	30	30	30	30	30	30	31
41.5	29	29	29	29	30	30	30	30	30	30	30	30	30	30	30	30	31	31	31	31
41	30	30	30	30	30	30	30	30	30	30	30	30	31	31	31	31	31	31	31	31
40.5	30	30	30	30	30	30	30	30	31	31	31	31	31	31	31	31	31	31	31	31
40	30	30	30	30	31	31	31	31	31	31	31	31	31	31	31	31	32	32	32	32
39.5	30	31	31	31	31	31	31	31	31	31	31	31	31	31	32	32	32	32	32	32
39	31	31	31	31	31	31	31	31	31	32	32	32	32	32	32	32	32	32	32	32
38.5	31	31	31	31	31	32	32	32	32	32	32	32	32	32	32	32	32	33	33	33
38	31	31	32	32	32	32	32	32	32	32	32	32	32	32	32	32	33	33	33	33
37.5	32	32	32	32	32	32	32	32	32	32	32	33	33	33	33	33	33	33	33	33
37	32	32	32	32	32	32	33	33	33	33	33	33	33	33	33	33	33	33	33	34
36.5	32	32	32	33	33	33	33	33	33	33	33	33	33	33	33	33	33	34	34	34
36	33	33	33	33	33	33	33	33	33	33	33	33	34	34	34	34	34	34	34	34
35.5	33	33	33	33	33	33	33	34	34	34	34	34	34	34	34	34	34	34	34	35
35	33	33	33	33	34	34	34	34	34	34	34	34	34	34	34	34	35	35	35	35
34.5	34	34	34	34	34	34	34	34	34	34	34	34	34	34	35	35	35	35	35	35
34	34	34	34	34	34	34	34	34	35	35	35	35	35	35	35	35	35	35	35	35
33.5	34	34	34	34	35	35	35	35	35	35	35	35	35	35	35	35	36	36	36	36
33	34	35	35	35	35	35	35	35	35	35	35	35	35	35	36	36	36	36	36	36
32.5	35	35	35	35	35	35	35	35	35	36	36	36	36	36	36	36	36	36	36	36
32	35	35	35	35	35	36	36	36	36	36	36	36	36	36	36	36	36	37	37	37
31.5	35	35	36	36	36	36	36	37	37	37	37	37	37	37	37	37	37	37	37	37
31	36	36	36	36	36	36	36	36	36	36	36	37	37	37	37	37	37	37	37	37
30.5	36	36	36	36	36	36	37	37	37	37	37	37	37	37	37	37	37	37	38	38
30	36	36	37	37	37	37	37	37	37	37	37	37	37	37	37	38	38	38	38	38
29.5	37	37	37	37	37	37	37	37	37	37	37	37	37	37	38	38	38	38	38	38

**TABLE-3: Female BF% Estimation**  
**(Measurements needed: Height, Waist, and Weight)**

	Weight (lbs)																		
	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239
53	24	24	24	24	24	24	24	24	25	25	25	25	25	25	25	25	25	25	25
52.5	24	24	24	24	24	25	25	25	25	25	25	25	25	25	25	25	25	26	26
52	24	24	25	25	25	25	25	25	25	25	25	25	25	26	26	26	26	26	26
51.5	25	25	25	25	25	25	25	25	25	25	25	26	26	26	26	26	26	26	26
51	25	25	25	25	25	25	26	26	26	26	26	26	26	26	26	26	26	27	27
50.5	25	25	26	26	26	26	26	26	26	26	26	26	26	26	27	27	27	27	27
50	26	26	26	26	26	26	26	26	26	26	26	26	27	27	27	27	27	27	27
49.5	26	26	26	26	26	26	27	27	27	27	27	27	27	27	27	27	27	27	28
49	26	26	26	27	27	27	27	27	27	27	27	27	27	27	27	28	28	28	28
48.5	27	27	27	27	27	27	27	27	27	27	27	28	28	28	28	28	28	28	28
48	27	27	27	27	27	27	27	27	28	28	28	28	28	28	28	28	28	28	28
47.5	27	27	27	27	28	28	28	28	28	28	28	28	28	28	28	28	29	29	29
47	28	28	28	28	28	28	28	28	28	28	28	29	29	29	29	29	29	29	29
46.5	28	28	28	28	28	28	28	28	29	29	29	29	29	29	29	29	29	29	29
46	28	28	28	28	29	29	29	29	29	29	29	29	29	29	29	29	30	30	30
45.5	28	29	29	29	29	29	29	29	29	29	29	29	30	30	30	30	30	30	30
45	29	29	29	29	29	29	29	29	29	30	30	30	30	30	30	30	30	30	30
44.5	29	29	29	29	29	30	30	30	30	30	30	30	30	30	30	30	30	31	31
44	29	29	30	30	30	30	30	30	30	30	30	30	30	30	31	31	31	31	31
43.5	30	30	30	30	30	30	30	30	30	30	31	31	31	31	31	31	31	31	31
43	30	30	30	30	30	30	30	31	31	31	31	31	31	31	31	31	31	32	32
42.5	30	30	30	31	31	31	31	31	31	31	31	31	31	31	31	31	32	32	32
42	31	31	31	31	31	31	31	31	31	31	31	32	32	32	32	32	32	32	32
41.5	31	31	31	31	31	31	31	32	32	32	32	32	32	32	32	32	32	32	33
41	31	31	31	31	32	32	32	32	32	32	32	32	32	32	32	32	33	33	33
40.5	32	32	32	32	32	32	32	32	32	32	32	32	33	33	33	33	33	33	33
40	32	32	32	32	32	32	32	32	33	33	33	33	33	33	33	33	33	33	33
39.5	32	32	32	32	32	33	33	33	33	33	33	33	33	33	33	33	34	34	34
39	32	33	33	33	33	33	33	33	33	33	33	33	33	34	34	34	34	34	34
38.5	33	33	33	33	33	33	33	33	34	34	34	34	34	34	34	34	34	34	34
38	33	33	33	33	33	34	34	34	34	34	34	34	34	34	34	34	35	35	35
37.5	33	33	34	34	34	34	34	34	34	34	34	34	34	34	34	35	35	35	35
37	34	34	34	34	34	34	34	34	34	34	34	35	35	35	35	35	35	35	35
36.5	34	34	34	34	34	34	35	35	35	35	35	35	35	35	35	35	35	36	36
36	34	34	34	35	35	35	35	35	35	35	35	35	35	35	36	36	36	36	36
35.5	35	35	35	35	35	35	35	35	35	35	35	36	36	36	36	36	36	36	36
35	35	35	35	35	35	35	36	36	36	36	36	36	36	36	36	36	36	36	37
34.5	35	35	35	36	36	36	36	36	36	36	36	36	36	36	36	37	37	37	37
34	36	36	36	36	36	36	36	36	36	36	36	36	36	37	37	37	37	37	37
33.5	36	36	36	36	36	36	36	36	37	37	37	37	37	37	37	37	37	37	37
33	36	36	36	36	37	37	37	37	37	37	37	37	37	37	37	37	38	38	38
32.5	36	37	37	37	37	37	37	37	37	37	37	37	38	38	38	38	38	38	38
32	37	37	37	37	37	37	37	37	37	37	38	38	38	38	38	38	38	38	38

**TABLE-3: Female BF% Estimation**  
**(Measurements needed: Height, Waist, and Weight)**

	Weight (lbs)																			
	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260
56	24	24	24	24	24	24	24	24	24	24	24	25	25	25	25	25	25	25	25	25
55.5	24	24	24	24	24	24	24	25	25	25	25	25	25	25	25	25	25	25	25	26
55	24	24	24	25	25	25	25	25	25	25	25	25	25	25	25	25	26	26	26	26
54.5	25	25	25	25	25	25	25	25	25	25	25	25	26	26	26	26	26	26	26	26
54	25	25	25	25	25	25	25	25	26	26	26	26	26	26	26	26	26	26	26	26
53.5	25	25	25	25	26	26	26	26	26	26	26	26	26	26	26	26	26	27	27	27
53	25	26	26	26	26	26	26	26	26	26	26	26	27	27	27	27	27	27	27	27
52.5	26	26	26	26	26	26	26	26	26	27	27	27	27	27	27	27	27	27	27	27
52	26	26	26	26	26	27	27	27	27	27	27	27	27	27	27	27	27	27	28	28
51.5	26	27	27	27	27	27	27	27	27	27	27	27	27	27	28	28	28	28	28	28
51	27	27	27	27	27	27	27	27	27	27	28	28	28	28	28	28	28	28	28	28
50.5	27	27	27	27	27	27	28	28	28	28	28	28	28	28	28	28	28	28	28	29
50	27	27	28	28	28	28	28	28	28	28	28	28	28	28	29	29	29	29	29	29
49.5	28	28	28	28	28	28	28	28	28	29	29	29	29	29	29	29	29	29	29	29
49	28	28	28	28	28	28	28	29	29	29	29	29	29	29	29	29	29	29	29	30
48.5	28	28	28	29	29	29	29	29	29	29	29	29	29	29	29	29	30	30	30	30
48	29	29	29	29	29	29	29	29	29	29	30	30	30	30	30	30	30	30	30	30
47.5	29	29	29	29	29	29	29	30	30	30	30	30	30	30	30	30	30	30	30	31
47	29	29	29	29	30	30	30	30	30	30	30	30	30	30	30	30	30	31	31	31
46.5	30	30	30	30	30	30	30	30	30	30	30	30	31	31	31	31	31	31	31	31
46	30	30	30	30	30	30	30	31	31	31	31	31	31	31	31	31	31	31	31	31
45.5	30	30	30	30	31	31	31	31	31	31	31	31	31	31	31	31	31	32	32	32
45	30	31	31	31	31	31	31	31	31	31	31	31	31	31	32	32	32	32	32	32
44.5	31	31	31	31	31	31	31	31	31	32	32	32	32	32	32	32	32	32	32	32
44	31	31	31	31	31	32	32	32	32	32	32	32	32	32	32	32	32	33	33	33
43.5	31	31	32	32	32	32	32	32	32	32	32	32	32	32	32	33	33	33	33	33
43	32	32	32	32	32	32	32	32	32	32	33	33	33	33	33	33	33	33	33	33
42.5	32	32	32	32	32	33	33	33	33	33	33	33	33	33	33	33	33	33	33	34
42	32	32	32	33	33	33	33	33	33	33	33	33	33	33	33	33	34	34	34	34
41.5	33	33	33	33	33	33	33	33	33	33	33	34	34	34	34	34	34	34	34	34
41	33	33	33	33	33	33	33	34	34	34	34	34	34	34	34	34	34	34	34	35
40.5	33	33	33	33	34	34	34	34	34	34	34	34	34	34	34	34	35	35	35	35
40	34	34	34	34	34	34	34	34	34	34	34	34	34	35	35	35	35	35	35	35
39.5	34	34	34	34	34	34	34	35	35	35	35	35	35	35	35	35	35	35	35	35
39	34	34	34	34	34	35	35	35	35	35	35	35	35	35	35	35	36	36	36	36
38.5	34	35	35	35	35	35	35	35	35	35	35	35	35	35	36	36	36	36	36	36
38	35	35	35	35	35	35	35	35	35	36	36	36	36	36	36	36	36	36	36	36
37.5	35	35	35	35	36	36	36	36	36	36	36	36	36	36	36	36	36	37	37	37
37	35	35	36	36	36	36	36	36	36	36	36	36	36	36	36	37	37	37	37	37
36.5	36	36	36	36	36	36	36	37	37	37	37	37	37	37	37	37	37	37	37	37
36	36	36	36	36	36	36	37	37	37	37	37	37	37	37	37	37	37	37	38	38
35.5	36	36	36	37	37	37	37	37	37	37	37	37	37	37	37	38	38	38	38	38
35	37	37	37	37	37	37	37	37	37	37	37	37	37	37	38	38	38	38	38	38

**TABLE-3: Female BF% Estimation**  
**(Measurements needed: Height, Waist, and Weight)**

Height-Waist Difference (Height - Waist, inches)	Weight (lbs)																			
	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280
58.5	24	24	24	24	24	24	24	24	24	25	25	25	25	25	25	25	25	25	25	25
58	24	24	24	24	24	25	25	25	25	25	25	25	25	25	25	25	25	26	26	26
57.5	24	24	25	25	25	25	25	25	25	25	25	25	25	26	26	26	26	26	26	26
57	25	25	25	25	25	25	25	25	25	25	26	26	26	26	26	26	26	26	26	26
56.5	25	25	25	25	25	25	26	26	26	26	26	26	26	26	26	26	26	26	27	27
56	25	25	25	26	26	26	26	26	26	26	26	26	26	26	27	27	27	27	27	27
55.5	26	26	26	26	26	26	26	26	26	26	26	27	27	27	27	27	27	27	27	27
55	26	26	26	26	26	26	27	27	27	27	27	27	27	27	27	27	27	27	27	28
54.5	26	26	26	27	27	27	27	27	27	27	27	27	27	27	27	27	28	28	28	28
54	27	27	27	27	27	27	27	27	27	27	27	28	28	28	28	28	28	28	28	28
53.5	27	27	27	27	27	27	27	27	28	28	28	28	28	28	28	28	28	28	28	28
53	27	27	27	27	28	28	28	28	28	28	28	28	28	28	28	28	29	29	29	29
52.5	27	28	28	28	28	28	28	28	28	28	28	28	28	29	29	29	29	29	29	29
52	28	28	28	28	28	28	28	28	28	29	29	29	29	29	29	29	29	29	29	29
51.5	28	28	28	28	28	29	29	29	29	29	29	29	29	29	29	29	29	30	30	30
51	28	29	29	29	29	29	29	29	29	29	29	29	29	30	30	30	30	30	30	30
50.5	29	29	29	29	29	29	29	29	29	30	30	30	30	30	30	30	30	30	30	30
50	29	29	29	29	29	29	30	30	30	30	30	30	30	30	30	30	30	30	31	31
49.5	29	29	30	30	30	30	30	30	30	30	30	30	30	30	31	31	31	31	31	31
49	30	30	30	30	30	30	30	30	30	31	31	31	31	31	31	31	31	31	31	31
48.5	30	30	30	30	30	30	31	31	31	31	31	31	31	31	31	31	31	31	32	32
48	30	30	30	31	31	31	31	31	31	31	31	31	31	31	31	31	32	32	32	32
47.5	31	31	31	31	31	31	31	31	31	31	31	32	32	32	32	32	32	32	32	32
47	31	31	31	31	31	31	31	31	32	32	32	32	32	32	32	32	32	32	32	33
46.5	31	31	31	31	32	32	32	32	32	32	32	32	32	32	32	32	32	33	33	33
46	32	32	32	32	32	32	32	32	32	32	32	32	32	33	33	33	33	33	33	33
45.5	32	32	32	32	32	32	32	32	33	33	33	33	33	33	33	33	33	33	33	33
45	32	32	32	32	32	33	33	33	33	33	33	33	33	33	33	33	33	34	34	34
44.5	32	33	33	33	33	33	33	33	33	33	33	33	33	33	34	34	34	34	34	34
44	33	33	33	33	33	33	33	33	33	34	34	34	34	34	34	34	34	34	34	34
43.5	33	33	33	33	33	33	34	34	34	34	34	34	34	34	34	34	34	35	35	35
43	33	33	34	34	34	34	34	34	34	34	34	34	34	34	34	35	35	35	35	35
42.5	34	34	34	34	34	34	34	34	34	34	35	35	35	35	35	35	35	35	35	35
42	34	34	34	34	34	34	35	35	35	35	35	35	35	35	35	35	35	35	36	36
41.5	34	34	34	35	35	35	35	35	35	35	35	35	35	35	35	36	36	36	36	36
41	35	35	35	35	35	35	35	35	35	35	35	36	36	36	36	36	36	36	36	36
40.5	35	35	35	35	35	35	35	36	36	36	36	36	36	36	36	36	36	36	36	37
40	35	35	35	35	36	36	36	36	36	36	36	36	36	36	36	36	37	37	37	37
39.5	36	36	36	36	36	36	36	36	36	36	36	36	36	37	37	37	37	37	37	37
39	36	36	36	36	36	36	36	36	37	37	37	37	37	37	37	37	37	37	37	37
38.5	36	36	36	36	37	37	37	37	37	37	37	37	37	37	37	37	38	38	38	38
38	36	37	37	37	37	37	37	37	37	37	37	37	37	37	37	38	38	38	38	38
37.5	37	37	37	37	37	37	37	37	37	38	37	38	38	38	38	38	38	38	38	38

**TABLE-3: Female BF% Estimation**  
**(Measurements needed: Height, Waist, and Weight)**

Height-Waist Difference (Height - Waist, inches)	Weight (lbs)																			
	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300
61.5	24	24	24	24	24	24	24	24	24	24	24	25	25	25	25	25	25	25	25	25
61	24	24	24	24	24	24	24	25	25	25	25	25	25	25	25	25	25	25	25	26
60.5	24	24	24	24	25	25	25	25	25	25	25	25	25	25	25	26	26	26	26	26
60	25	25	25	25	25	25	25	25	25	25	25	25	26	26	26	26	26	26	26	26
59.5	25	25	25	25	25	25	25	25	26	26	26	26	26	26	26	26	26	26	26	26
59	25	25	25	25	26	26	26	26	26	26	26	26	26	26	26	26	26	27	27	27
58.5	25	26	26	26	26	26	26	26	26	26	26	26	26	27	27	27	27	27	27	27
58	26	26	26	26	26	26	26	26	26	27	27	27	27	27	27	27	27	27	27	27
57.5	26	26	26	26	26	27	27	27	27	27	27	27	27	27	27	27	27	27	28	28
57	26	26	27	27	27	27	27	27	27	27	27	27	27	28	28	28	28	28	28	28
56.5	27	27	27	27	27	27	27	27	27	27	28	28	28	28	28	28	28	28	28	28
56	27	27	27	27	27	27	28	28	28	28	28	28	28	28	28	28	28	28	29	29
55.5	27	27	28	28	28	28	28	28	28	28	28	28	28	28	29	29	29	29	29	29
55	28	28	28	28	28	28	28	28	28	28	28	29	29	29	29	29	29	29	29	29
54.5	28	28	28	28	28	28	28	29	29	29	29	29	29	29	29	29	29	29	29	30
54	28	28	28	29	29	29	29	29	29	29	29	29	29	29	29	30	30	30	30	30
53.5	29	29	29	29	29	29	29	29	29	29	29	30	30	30	30	30	30	30	30	30
53	29	29	29	29	29	29	29	29	30	30	30	30	30	30	30	30	30	30	30	30
52.5	29	29	29	29	30	30	30	30	30	30	30	30	30	30	30	30	30	31	31	31
52	30	30	30	30	30	30	30	30	30	30	30	31	31	31	31	31	31	31	31	31
51.5	30	30	30	30	30	30	30	30	31	31	31	31	31	31	31	31	31	31	31	31
51	30	30	30	30	30	31	31	31	31	31	31	31	31	31	31	31	31	31	32	32
50.5	30	31	31	31	31	31	31	31	31	31	31	31	31	32	32	32	32	32	32	32
50	31	31	31	31	31	31	31	31	31	32	32	32	32	32	32	32	32	32	32	32
49.5	31	31	31	31	31	31	32	32	32	32	32	32	32	32	32	32	32	32	33	33
49	31	31	32	32	32	32	32	32	32	32	32	32	32	32	33	33	33	33	33	33
48.5	32	32	32	32	32	32	32	32	32	32	33	33	33	33	33	33	33	33	33	33
48	32	32	32	32	32	32	32	33	33	33	33	33	33	33	33	33	33	33	33	34
47.5	32	32	32	33	33	33	33	33	33	33	33	33	33	33	33	33	34	34	34	34
47	33	33	33	33	33	33	33	33	33	33	33	34	34	34	34	34	34	34	34	34
46.5	33	33	33	33	33	33	33	34	34	34	34	34	34	34	34	34	34	34	34	35
46	33	33	33	33	34	34	34	34	34	34	34	34	34	34	34	34	34	35	35	35
45.5	34	34	34	34	34	34	34	34	34	34	34	34	35	35	35	35	35	35	35	35
45	34	34	34	34	34	34	34	34	35	35	35	35	35	35	35	35	35	35	35	35
44.5	34	34	34	34	34	35	35	35	35	35	35	35	35	35	35	35	36	36	36	36
44	34	35	35	35	35	35	35	35	35	35	35	35	35	36	36	36	36	36	36	36
43.5	35	35	35	35	35	35	35	35	35	36	36	36	36	36	36	36	36	36	36	36
43	35	35	35	35	35	36	36	36	36	36	36	36	36	36	36	36	36	37	37	37
42.5	35	35	36	36	36	36	36	36	36	36	36	36	36	36	36	37	37	37	37	37
42	36	36	36	36	36	36	36	36	36	36	36	37	37	37	37	37	37	37	37	37
41.5	36	36	36	36	36	36	37	37	37	37	37	37	37	37	37	37	37	37	38	38
41	36	36	36	37	37	37	37	37	37	37	37	37	37	37	37	38	38	38	38	38
40.5	37	37	37	37	37	37	37	37	37	37	37	37	37	37	38	38	38	38	38	38