## POWERLIFTING

The Official Special Olympics Sports Rules for Powerlifting shall govern all Special Olympics competitions. As an international sports program, Special Olympics has created these rules based upon International Powerlifting Federation (IPF) rules for Powerlifting found at http://www.powerlifting-ipf.com/. IPF or National Governing Body (NGB) rules shall be employed except when they are in conflict with the Official Special Olympics Sports Rules for Powerlifting or Article I. In such cases, the Official Special Olympics Sports Rules for Powerlifting shall apply.

Refer to Article 1, http://resources.specialolympics.org/article1.aspx for more information pertaining to Codes of Conduct, Training Standards, Medical and Safety Requirements, Divisioning, Awards, Criteria for Advancement to Higher Levels of Competition, and Unified Sports.

## SECTION A — OFFICIAL EVENTS

The following is a list of official events available in Special Olympics.
The range of events is intended to offer competition opportunities for athletes of all abilities. Programs may determine the events offered and, if required, guidelines for the management of those events. Coaches are responsible for providing training and event selection appropriate to each athlete's skill and interest.

1. Squat
2. Bench press
3. Dead lift
4. Combination (Bench press and Dead lift) or
5. Combination (Squat, Bench press and Dead lift)

## SECTION B - EQUIPMENT

1. Bar and Disc Specifications
a. Distance between collars: 1.31 meters ( 4 feet, $31 / 2$ inches) at a maximum
b. Total length outside the sleeves: 2.20 meters ( 7 feet, $23 / 4$ inches) at a maximum
c. Diameter of the bar: 28 millimeters ( $17 / 8$ inches) minimum; 29 millimeters ( $113 / 16$ inches) maximum
d. Diameter of the largest disc: 45 centimeters (1 foot, $53 / 4$ inches)
e. Weight of the largest disc: 25 kg ( 55 lbs .)
f. Weight of the bar: $20 \mathrm{~kg}(45 \mathrm{lbs})$ with collars: $25 \mathrm{~kg}(55 \mathrm{lbs}$.
g. The discs must be in the following range: 25 kg ( 55 lbs.$), 20 \mathrm{~kg}$ ( 44 lbs .), 15 kg ( 33 lbs .), 10 kg ( 22 lbs.), 5 kg (11 lbs.), 2.5 kg ( 5.5 lbs.$), 1.25 \mathrm{~kg}(2.5 \mathrm{lbs}$.
h. Discs must conform to the following color code: 10 kg and under - any color other than those designated for heavier discs; 15 kg - yellow; 20 kg — blue; 25 kg — red
i. All discs must be clearly marked with their weight and must weigh within .25 percent of their face value
j. Collars shall always be used when discs are loaded on the bar.
2. Bench Specifications
a. Standard Flat Level Bench (attached safety standards must be used for all events: Length: no less than 1.22 meters

Width: 29-32 centimeters
Height: 42-45 centimeters
b. Disabled Flat Level Bench

Length: 2.1 meters overall Width: Head end - 30.5 centimeters
Height: 45-50 centimeters
Width: Main Body - 61 centimeters
3. Costume and Personal Equipment
a. Lifting Suit

The lifting costume shall consist of a one-piece, full-length lifting suit of one-ply stretch material without any patches or padding. A non-supportive weightlifting/wrestling-type suit is also a legal suit. The straps of the suit must be worn over the shoulders at all times while lifting in competition. The lifting suit shall also be subject to the following requirements:

1) It may be of any color or colors.
2) Seams and hems must not exceed 3 centimeters in width and 0.5 centimeters in thickness. Only non-supportive suits may have seams and hems exceeding 3 centimeters in width.
3) Seams may be protected or strengthened by narrow gauge webbing or stretch material not exceeding 2 centimeters in width and 0.5 centimeters in thickness.
4) It must have legs, and the length of the leg must be a minimum of 3 centimeters and must not exceed 15 centimeters from the middle of the crotch measured down the inside of the leg from the crotch. Non-supportive weightlifting-type suits may have legs longer than 15 centimeters as long as they do not reach the knee and do not touch any knee wrap or knee-cap supporter.
5) Only non-supportive type suits may have a double crotch.
6) Long pants may not be worn.
7) At Special Olympics World and Regional Games powerlifting competitions, all competitors must wear a lifting suit which conforms to the above stated specifications, the only exception being the full-length aerobic suit worn in the bench press by athletes with physical disabilities (see modifications under 4.a).
b. Undershirt

An undershirt (commonly known as a "T-shirt") of any color or colors must be worn under the lifting suit by all competitors during the performance of the squat and the bench press. It is optional for men, but mandatory for women to wear a T-shirt during the performance of the dead lift. The T-shirt is subject to the following conditions:

1) Is not ribbed
2) Does not consist of any rubberized or similar stretch material. Specialized "Bench" shirts are not permitted.
3) Does not have reinforced seams or seams which might tend to assist the lifter in competition
4) Must have sleeves, which do not terminate below the elbow or up at the deltoid
c. Briefs.

A standard commercial "athletic supporter" or standard commercial briefs of any mixture of cotton, nylon or polyester (but not swimming trunks or any other garment of rubberized or similar stretch) material shall be worn under the lifting suit. Specialized "Squat Briefs" shall not be worn. Women competitors shall wear non-supportive protective briefs or panties.
d. Footgear

Long socks (up to the knee) must be worn for the Dead lift. Sports type shoes e.g. trainers, powerlifting or weightlifting boots ONLY must be worn. No hiking or work boots allowed. The height of the heels shall not exceed 5 centimeters.
e. Belt

A belt made of leather, vinyl, nylon or other similar non-stretch or non-metal (other than buckle and stud attachments material) may be worn on the outside of the suit. Dimensions: Width — a
maximum of 10 centimeters; thickness - a maximum of 13 millimeters. The belt may not encircle the body more than once. Belts shall not have additional padding.
f. Wraps

1) Wrist wraps of a maximum width of 8 centimeters and a maximum length of 1 meter may be worn. A wrist wrap shall not extend beyond 10 centimeters above or 2 centimeters below the center of the wrist. In lieu of wrist wraps, wristbands not exceeding 10 centimeters in width may be worn. If wrist wraps are wrap-around style, with or without stitching, to form a sleeve, they may have Velcro patches not exceeding 30 centimeters in total length and 8 centimeters in width as well as a thumb loop. The total length of a wristband shall not exceed 50 centimeters. The thumb loop shall not be over the thumb during the competitive lift.
2) Knee wraps - wraps not exceeding 2 meters in length and 8 cm in width may be used.. When worn, wraps should not be in contact with the socks or the lifting suit.
a) Supportive wraps - Only IPF approved wraps shall be permitted for use in powerlifting competitions.
b) Non supportive wraps: Wraps made of medical crepe or bandage and sweatbands do not require IPF approval.
g. General

Baby powder, pool-hall chalk, liquid chalk, resin, talc or magnesium carbonate are the only substances that may be added to the body or attire. The use of oil, grease, or other lubricants is forbidden.
4. Modifications
a. Athletes with physical disabilities (e.g., wheelchair, cerebral palsy, amputees), may wear a twopiece outfit with both upper and lower pieces being form fitting; either snug-fitting track trousers or snug-fitting shorts may be worn. A full-length aerobic suit may be worn while performing the bench press. Lifting with a prosthesis is allowed and orthosis with shoes will be allowed.

## SECTION C - DIVISIONING AND COMPETITION SCHEDULE

1. Athletes shall be placed in divisions according to gender, age, ability and weight class. Minimum age to compete is 14 Gender: Male/Female. Age: Sub-Junior: 14-18, Junior 19-23, Senior:24-39, Master:40 and over, Divisions: all weight classes.
a. Male
1) 53 kg (111 lbs.)
2) $59 \mathrm{~kg}(130 \mathrm{lbs}$.
3) $66 \mathrm{~kg}(145.5 \mathrm{lbs}$.
4) 74 kg (163 lbs.)
5) 83 kg ( 183 lbs.$)$
6) $93 \mathrm{~kg}(205 \mathrm{lbs}$.
7) $105 \mathrm{~kg}(231 \mathrm{lbs}$.
8) $120 \mathrm{~kg}(264.5 \mathrm{lbs}$.
9) $120+\mathrm{kg}$ (264.75 or more lbs.)
b. Female
10) 43 kg ( 95.75 lbs .)
11) 47 kg (103 lbs.)
12) $52 \mathrm{~kg}(114.50 \mathrm{lbs}$.
13) $57 \mathrm{~kg}(125.50 \mathrm{lbs}$.
14) 63 kg (139 lbs.)
15) 72 kg ( 158.5 lbs .)
16) $84 \mathrm{~kg}(185 \mathrm{lbs}$.
17) $84+\mathrm{kg} \mathrm{kg}$ ( 185.25 or more lbs.)
c. Weight classes are a divisioning tool which groups athletes according to body weight which is the primary determinant of ability. The Wilkes Formula should be used when there are not enough athletes to have at least three athletes per weight class or to place the combined score of an athlete and partner for Special Olympics Unified Sports ${ }^{\circledR}$ powerlifting.
d. Divisions within gender, age and weight categories should be based upon "opening attempts." The athlete's opening attempt should be based upon a previous official performance and should not be significantly higher or lower (except in the case of injury). In that case, the athlete's previous performance must have been within the previous six to 12 months. A signed score sheet or score card must be provided to verify the athlete's prior performance.
2. Weigh-in
a. An athlete's weight category must be declared at the technical meeting to be scheduled and announced prior to the first day of competition.
b. The weigh-in of competitors must take place two hours before the beginning of competition for a particular category and be completed in no more than one hour and thirty minutes. All the lifters in the category must attend the weigh-in, which shall be carried out in the presence of the three referees appointed for the category.
c. Weigh-in will be in secret and the lifters will be allowed in one at a time. The weigh-in room will be locked and the persons allowed in it are the referees for the body-weight classes, the lifter and his/her coach or trainer. The weigh-in results will not be made known until all the lifters in a particular weight class have been weighed in.
d. Each competitor can only have his/her official weight registered once. Only those heavier or lighter than the category limit are allowed to return to the scales within the limits of the hour and thirty minutes allowed from the beginning of the weigh-in.
e. An athlete weighing in above the upper limit for a weight class will be moved to the next heavier weight class. An athlete weighing in below the minimum limit for a weight class may, at the discretion of the Chief Referee, be permitted to lift in the next lightest weight class if that competition is available. If competition in the lighter weight class is not available, the athlete will be permitted to lift outside the official competition and receive a participant's ribbon.
3. Rounds System - Lifters will be divided into flights of no more than 14 lifters in each flight. In each flight, the lifter with the lightest attempt will lift first, and the weight loaded onto the bar will be progressively increased until everyone in the flight has lifted. The bar will then be unloaded and second attempts will be performed in the same fashion, followed by third attempts. In no case can the weight be reduced after the lifter has attempted to perform a lift with the announced weight. Then the next flight will lift.

## SECTION D - PERSONNEL

1. The Chief Referee shall be seated in front of the platform. The three referees may seat themselves according to the best vantage points; usually the Chief Referee sits directly in front of the platform and the other two referees on each side of the platform. A timekeeper shall also be appointed and shall be a certified official.
2. The Chief Referee will be solely responsible for decisions made in the case of loading errors or incorrect announcements by the speaker. The Chief Referee's decision will be given $t \mathrm{o}$ the speaker who will make the appropriate announcement.
3. A Platform Manager shall be appointed and shall be a certified official.

## SECTION E - RULES OF COMPETITION

## 1. General Rules and Modifications

a. During any competition organized on a platform or stage, no one other than the lifter, the members of the jury, the officiating referees, assigned medical personnel, assigned platform personnel and the manager and/or the competing lifter's coach shall be allowed around the platform or on the stage.
b. Before the beginning of competitions, the referees and platform officials must check the weight of the bar and discs so that the total weight may be identical with that announced.
c. An area on the stage to the left and behind the Chief Referee will be marked and may be occupied by the coach during the performance of his/her athlete's lift attempt. The coach may give manual signals.
d. Each competitor shall be allowed a period of one minute from the calling of his/her name to the starting of the attempt. If the delay exceeds one minute, the attempt shall be forfeited. The clock shall stop when the lifter starts the lift properly. Lifters with anatomical (physical) disabilities (as stated on the expedite card at the time of the weigh-in) will be granted extra time, up to three minutes if needed.
e. First round attempts should be submitted at weigh-ins.
f. A lifter must submit his second or third attempts within one minute of completing his preceding attempt. The one minute will begin from the time the lights are activated. If no weight is submitted within the one minute time allowance, the lifter will be granted a 2.5 kg increase on his next attempt. Should the lifter have failed his previous attempt, and not submitted a weight for a further attempt within the one minute time allowance, then the bar will be loaded to the failed weight.
g. A lift must be declared "no lift," and the lifter must be disqualified if, in the majority opinion of the judges and Chief Referee, the weights were dropped intentionally.
h. Scoring of the events shall be the maximum weight lifted for each event and a total combination maximum weight for all events.
i. The Wilkes Formula (WF * See Appendix) is presented, in kilograms, as a table of coefficients. Each lifter has a coefficient determined by bodyweight (BW). To determine the placing of lifters, multiply each lifter's coefficient by his/her total. The resulting factor is his/her Wilkes Formula Total (WFT). The lifter having the highest WFT is awarded first, the second highest second, etc.
2. Event Specific Rules and Modifications
a. Squat

1) The lifter shall assume an upright position with the top of the bar not more than 3 centimeters below the top surface of the anterior deltoids. The bar shall be held horizontally across the shoulders with the hands and fingers gripping the bar (not the collars) and the feet flat on the platform with the knees locked.
2) After removing the bar from the racks, the lifter must move backward to establish his/her position. The lifter shall wait in this position for the Chief Referee's signal. The signal shall be given as soon as the lifter is motionless and the bar properly positioned. If mechanical racks that withdraw are used, the lifter must remove the barbell from the racks before they are withdrawn and wait motionless for the Chief Referee's signal. The signal shall consist of a downward movement of the arm and audible command "Squat."
3) Upon receiving the Chief Referee's signal, the lifter must bend and lower the body until the top surfaces of the legs at the hip joints are lower than the top of the knees.

Illustration showing proper depth in squat.

4) The lifter must recover at will without double bouncing or any downward movement after starting to an upright position with the knees locked. When the lifter is motionless, the Chief Referee will give the signal to replace the bar.
5) The signal to replace the bar will consist of a backward motion of the hand and the audible command "Rack." The lifter must then make a bona fide attempt to return the bar to the racks.
6) The lifter shall face the front of the platform.
7) The lifter shall not hold the collars, sleeves or discs at any time during the performance of the lift. However, the edge of the hands, gripping the bar, may be in contact with the inner surface of the collars.
8) Not more than five and not fewer than two spotters/loaders shall be on the platform at any one time.
9) The lifter may enlist the help of the spotters/loaders in removing the bar from the racks, and replacing the bar in the racks at the conclusion of the lift; however, once the bar has cleared the racks, spotters/loaders shall not assist the lifter further with regard to proper positioning, foot placement, bar positioning, etc.
10) The lifter may, at the Chief Referee's discretion, be given an additional attempt at the same weight if failure in an attempt was due to an error of one or more of the spotters/loaders or equipment failure.
11) An athlete with Down syndrome who has been diagnosed with Atlanto-axial Instability may not participate in the back squat lift in powerlifting. For additional information and the procedure for waiver of this restriction, please refer to Article I, Addendum F.
12) Causes for Disqualification in the Squat
a) Failure to observe the Chief Referee's signals at the commencement or completion of the lift
b) Double bouncing or more than one recovery attempt at the bottom of the lift
c) Failure to assume an upright position with knees locked at the commencement and completion of the lift
d) Any shifting of the feet laterally, backward, or forward, during the performance of the lift
e) Failure to bend the knees and lower the body until the top surfaces of the legs at the hip joints are lower than the top of the knees
f) Changing the position of the bar across the shoulders after the commencement of the lift
g) Contact of the bar or the lifter by the spotters/loaders between the Chief Referee's signals
h) Contact of elbows or upper arms with the legs
i) Failure to make a bona fide attempt to return the bar to the racks
j) Any dropping or dumping of the bar after completion of the lift
k) Failure to comply with any of the requirements contained in the general description of the lift
b. Bench press

1) The lifter must assume the following position on the bench, and maintain this position during the entire lift: the head and trunk (including buttocks) must be in contact with the surface of the bench, and the feet must be on the floor or plates. To achieve firm footing, flat-surfaced discs or blocks (not exceeding 30 centimeters in height) may be used. Lifters with physical disabilities shall be given the opportunity to use either the standard or the special bench for disabled lifters. The hands must grip the bar with the thumbs around grip, thus locking the bar safely in the hands. The use of the reverse grip is forbidden.
2) Lifters with physical disabilities may be strapped to the bench from the ankles to the hips using a strapping belt not to exceed 10 centimeters in width.
3) After removing the bar from the racks or receiving it from the spotters/loaders, the lifter shall wait with elbows locked for the Chief Referee's signal. The signal shall be given as soon as the lifter is motionless and the bar properly positioned at full arms extension.
a) Not more than four and not fewer than two official spotters/loaders shall assist in the competition areas.
b) The spacing of the hands shall not exceed 81 centimeters, measured between the index fingers.
c) Athletes who are anatomically unable to fully lockout a bench press must have a certified coach state so at the weigh-in. A medical certificate should accompany the request. No changes in proper lifting techniques can be made for the lifter after weigh-in.
d) The Chief Referee's signal shall consist of a downward movement of the arm together with the audible command: "Start."
e) After receiving the start signal, the lifter must lower the bar to the chest and hold it motionless. The Chief Referee shall give the audible signal "Press," at which time the bar shall be pressed upward with an even extension of the arms. When held motionless in this position, a visible signal consisting of a backward movement of the arm together with the audible command "Rack" shall be given. In case of a hearing impaired lifter, tactile signals may be employed.
f) In this lift, the referees shall station themselves at the best vantage points.
4) Causes for disqualification in the bench press
a) Failure to observe the Chief Referee's signals at the commencement or completion of the lift
b) Any change in the elected position after the "Start" signal; i.e., raising movement of the head/shoulders, buttocks or feet from their original points of contact with the bench or floor, or lateral movement of the hands on the bar. At no point may the athlete's feet come in contact with the bench or its supports.
c) Any heaving or bouncing of the bar from the chest after it has been motionless on the chest
d) Any pronounced/exaggerated uneven extension of the arms during the lift
e) Any downward movement of the bar in the course of being pressed out
f) Failure to press the bar to full arms extension (full arms length) at the completion of the attempt
g) Contact with the bar of lifter by the spotters/loaders between the Chief Referee's signals
h) Deliberate contact between the bar and the bar-rest uprights during the lift to make the lift easier
i) Failure to comply with any of the requirements contained in the general description of the lift
c. Dead lift
5) The bar must be positioned horizontally in front of the lifter's feet, gripped with an optional grip in both hands and lifted without downward movement until the lifter is standing erect. (Grip option: when gripping the bar, either the backs of both hands face front or the back of one hand and the palm of the other hand face front in what is called the over and under grip).
6) The lifter shall face the front of the platform.
7) On completion of the lift, the knees shall be locked in the straight position and the shoulders should be held in an erect position (not forward or rounded). The shoulders do not have to be thrust back past an erect position; however, if they are thrust back in that manner, and all other criterion are acceptable, the lift shall be accepted.
8) The Chief Referee's signal shall consist of the downward movement of the hand and the audible command "Down." The signal will not be given until the bar is held motionless and the lifter is in the completed position as determined by the Chief Referee.
9) Any attempts to raise the bar or deliberate attempts to lift the bar shall count as an attempt.
10) Causes for disqualification in the dead lift
a) Any downward movement of the bar or either end of the bar during the lift
b) Failure to stand erect with the shoulders in an erect position
c) Failure to lock the knees straight at the completion of the lift
d) Supporting the bar on the thighs during the performance of the lift. Note: Supporting the bar on the thighs may include also a secondary bending of the knees and dropping of the hips.
e) Lowering the bar before receiving the Chief Referee's signal
f) Allowing the bar to return to the platform without maintaining control with both hands
g) Failure to comply with any of the requirements contained in the general description of the lift
d. Combination
11) An athlete is required to compete in the bench press and dead lift combination, or the squat, bench press and dead lift combination to qualify for final score in the combination event.
12) An athlete's final score is calculated by adding together the maximum weight he/she successfully lifted in the bench press and dead lift, or the squat, bench press and dead lift.
13) Three unsuccessful attempts in any of the lifts will automatically eliminate the lifter from a Combination Event.

## WILKES FORMULA FOR MEN

| BW | 0 | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 40 | 1.3354 | 1.3311 | 1.3268 | 1.3225 | 1.3182 | 1.3140 | 1.3098 | 1.3057 | 1.3016 | 1.2975 |
| 41 | 1.2934 | 1.2894 | 1.2854 | 1.2814 | 1.2775 | 1.2736 | 1.2697 | 1.2658 | 1.2620 | 1.2582 |
| 42 | 1.2545 | 1.2507 | 1.2470 | 1.2433 | 1.2397 | 1.2360 | 1.2324 | 1.2289 | 1.2253 | 1.2218 |
| 43 | 1.2183 | 1.2148 | 1.2113 | 1.2079 | 1.2045 | 1.2011 | 1.1978 | 1.1944 | 1.1911 | 1.1878 |
| 44 | 1.1846 | 1.1813 | 1.1781 | 1.1749 | 1.1717 | 1.1686 | 1.1654 | 1.1623 | 1.1592 | 1.1562 |
| 45 | 1.1531 | 1.1501 | 1.1471 | 1.1441 | 1.1411 | 1.1382 | 1.1352 | 1.1323 | 1.1294 | 1.1266 |
| 46 | 1.1237 | 1.1209 | 1.1181 | 1.1153 | 1.1125 | 1.1097 | 1.1070 | 1.1042 | 1.1015 | 1.0988 |
| 47 | 1.0962 | 1.0935 | 1.0909 | 1.0882 | 1.0856 | 1.0830 | 1.0805 | 1.0779 | 1.0754 | 1.0728 |
| 48 | 1.0703 | 1.0678 | 1.0653 | 1.0629 | 1.0604 | 1.0580 | 1.0556 | 1.0532 | 1.0508 | 1.0484 |
| 49 | 1.0460 | 1.0437 | 1.0413 | 1.0390 | 1.0367 | 1.0344 | 1.0321 | 1.0299 | 1.0276 | 1.0254 |
| 50 | 1.0232 | 1.0210 | 1.0188 | 1.0166 | 1.0144 | 1.0122 | 1.0101 | 1.0079 | 1.0058 | 1.0037 |
| 51 | 1.0016 | 0.9995 | 0.9975 | 0.9954 | 0.9933 | 0.9913 | 0.9893 | 0.9873 | 0.9853 | 0.9833 |
| 52 | 0.9813 | 0.9793 | 0.9773 | 0.9754 | 0.9735 | 0.9715 | 0.9696 | 0.9677 | 0.9658 | 0.9639 |
| 53 | 0.9621 | 0.9602 | 0.9583 | 0.9565 | 0.9547 | 0.9528 | 0.9510 | 0.9492 | 0.9474 | 0.9457 |
| 54 | 0.9439 | 0.9421 | 0.9404 | 0.9386 | 0.9369 | 0.9352 | 0.9334 | 0.9317 | 0.9300 | 0.9283 |
| 55 | 0.9267 | 0.9250 | 0.9233 | 0.9217 | 0.9200 | 0.9184 | 0.9168 | 0.9152 | 0.9135 | 0.9119 |
| 56 | 0.9103 | 0.9088 | 0.9072 | 0.9056 | 0.9041 | 0.9025 | 0.9010 | 0.8994 | 0.8979 | 0.8964 |
| 57 | 0.8949 | 0.8934 | 0.8919 | 0.8904 | 0.8889 | 0.8874 | 0.8859 | 0.8845 | 0.8830 | 0.8816 |
| 58 | 0.8802 | 0.8787 | 0.8773 | 0.8759 | 0.8745 | 0.8731 | 0.8717 | 0.8703 | 0.8689 | 0.8675 |
| 59 | 0.8662 | 0.8648 | 0.8635 | 0.8621 | 0.8608 | 0.8594 | 0.8581 | 0.8568 | 0.8555 | 0.8542 |
| 60 | 0.8529 | 0.8516 | 0.8503 | 0.8490 | 0.8477 | 0.8465 | 0.8452 | 0.8439 | 0.8427 | 0.8415 |
| 61 | 0.8402 | 0.8390 | 0.8378 | 0.8365 | 0.8353 | 0.8341 | 0.8329 | 0.8317 | 0.8305 | 0.8293 |
| 62 | 0.8281 | 0.8270 | 0.8258 | 0.8246 | 0.8235 | 0.8223 | 0.8212 | 0.8200 | 0.8189 | 0.8178 |
| 63 | 0.8166 | 0.8155 | 0.8144 | 0.8133 | 0.8122 | 0.8111 | 0.8100 | 0.8089 | 0.8078 | 0.8067 |
| 64 | 0.8057 | 0.8046 | 0.8035 | 0.8025 | 0.8014 | 0.8004 | 0.7993 | 0.7983 | 0.7973 | 0.7962 |
| 65 | 0.7952 | 0.7942 | 0.7932 | 0.7922 | 0.7911 | 0.7901 | 0.7891 | 0.7881 | 0.7872 | 0.7862 |
| 66 | 0.785 | 0.7842 | 0.7832 | 0.7823 | 0.7813 | 0.7804 | 0.7794 | 0.7785 | 0.7775 | 0.7766 |
| 67 | 0.7756 | 0.7747 | 0.7738 | 0.7729 | 0.7719 | 0.7710 | 0.7701 | 0.7692 | 0.7683 | 0.7674 |
| 68 | 0.7665 | 0.7656 | 0.7647 | 0.7638 | 0.7630 | 0.7621 | 0.7612 | 0.7603 | 0.7595 | 0.7586 |
| 69 | 0.7578 | 0.7569 | 0.7561 | 0.7552 | 0.7544 | 0.7535 | 0.7527 | 0.7519 | 0.7510 | 0.7502 |
| 70 | 0.7494 | 0.7486 | 0.7478 | 0.7469 | 0.7461 | 0.7453 | 0.7445 | 0.7437 | 0.7430 | 0.7422 |
| 71 | 0.7414 | 0.7406 | 0.7398 | 0.7390 | 0.7383 | 0.7375 | 0.7367 | 0.7360 | 0.7352 | 0.7345 |
| 72 | 0.7337 | 0.7330 | 0.7322 | 0.7315 | 0.7307 | 0.7300 | 0.7293 | 0.7285 | 0.7278 | 0.7271 |
| 73 | 0.7264 | 0.7256 | 0.7249 | 0.7242 | 0.7235 | 0.7228 | 0.7221 | 0.7214 | 0.7207 | 0.7200 |
| 74 | 0.7193 | 0.7186 | 0.7179 | 0.7173 | 0.7166 | 0.7159 | 0.7152 | 0.7146 | 0.7139 | 0.7132 |
| 75 | 0.7126 | 0.7119 | 0.7112 | 0.7106 | 0.7099 | 0.7093 | 0.7086 | 0.7080 | 0.7074 | 0.7067 |
| 76 | 0.7061 | 0.7055 | 0.7048 | 0.7042 | 0.7036 | 0.7029 | 0.7023 | 0.7017 | 0.7011 | 0.7005 |
| 77 | 0.6999 | 0.6993 | 0.6987 | 0.6981 | 0.6975 | 0.6969 | 0.6963 | 0.6957 | 0.695 | 0.6945 |
| 78 | 0.6939 | 0.6933 | 0.6927 | 0.6922 | 0.6916 | 0.6910 | 0.6905 | 0.6899 | 0.6893 | 0.6888 |
| 79 | 0.6882 | 0.6876 | 0.6871 | 0.6865 | 0.6860 | 0.6854 | 0.6849 | 0.6843 | 0.6838 | 0.6832 |
| 80 | 0.6827 | 0.6822 | 0.6816 | 0.6811 | 0.6806 | 0.6800 | 0.6795 | 0.6790 | 0.6785 | 0.6779 |
| 81 | 0.6774 | 0.6769 | 0.6764 | 0.6759 | 0.6754 | 0.6749 | 0.6744 | 0.6739 | 0.6734 | 0.6729 |
| 82 | 0.6724 | 0.6719 | 0.6714 | 0.6709 | 0.6704 | 0.6699 | 0.6694 | 0.6689 | 0.6685 | 0.6680 |

## WILKES FORMULA FOR MEN continued

| BW | 0 | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 83 | 0.6675 | 0.6670 | 0.6665 | 0.6661 | 0.6656 | 0.6651 | 0.6647 | 0.6642 | 0.6637 | 0.6633 |
| 84 | 0.6628 | 0.6624 | 0.6619 | 0.6615 | 0.6610 | 0.6606 | 0.6601 | 0.6597 | 0.6592 | 0.6588 |
| 85 | 0.6583 | 0.6579 | 0.6575 | 0.6570 | 0.6566 | 0.6562 | 0.6557 | 0.6553 | 0.6549 | 0.6545 |
| 86 | 0.6540 | 0.6536 | 0.6532 | 0.6528 | 0.6523 | 0.6519 | 0.6515 | 0.6511 | 0.6507 | 0.6503 |
| 87 | 0.6499 | 0.6495 | 0.6491 | 0.6487 | 0.6483 | 0.6479 | 0.6475 | 0.6471 | 0.6467 | 0.6463 |
| 88 | 0.6459 | 0.6455 | 0.6451 | 0.6447 | 0.6444 | 0.6440 | 0.6436 | 0.6432 | 0.6428 | 0.6424 |
| 89 | 0.6421 | 0.6417 | 0.6413 | 0.6410 | 0.6406 | 0.6402 | 0.6398 | 0.6395 | 0.6391 | 0.6388 |
| 90 | 0.6384 | 0.6380 | 0.6377 | 0.6373 | 0.6370 | 0.6366 | 0.6363 | 0.6359 | 0.6356 | 0.6352 |
| 91 | 0.6349 | 0.6345 | 0.6342 | 0.6338 | 0.6335 | 0.6331 | 0.6328 | 0.6325 | 0.6321 | 0.6318 |
| 92 | 0.6315 | 0.6311 | 0.6308 | 0.6305 | 0.6301 | 0.6298 | 0.6295 | 0.6292 | 0.6288 | 0.6285 |
| 94 | 0.6250 | 0.6247 | 0.6244 | 0.6241 | 0.6238 | 0.6235 | 0.6232 | 0.6229 | 0.6226 | 0.6223 |
| 93 | 0.6282 | 0.6279 | 0.6276 | 0.6272 | 0.6269 | 0.6266 | 0.6263 | 0.6260 | 0.6257 | 0.6254 |
| 95 | 0.6220 | 0.6217 | 0.6214 | 0.6211 | 0.6209 | 0.6206 | 0.6203 | 0.6200 | 0.6197 | 0.6194 |
| 96 | 0.6191 | 0.6188 | 0.6186 | 0.6183 | 0.6180 | 0.6177 | 0.6174 | 0.6172 | 0.6169 | 0.6166 |
| 97 | 0.6163 | 0.6161 | 0.6158 | 0.6155 | 0.6152 | 0.6150 | 0.6147 | 0.6144 | 0.6142 | 0.6139 |
| 98 | 0.6136 | 0.6134 | 0.6131 | 0.6129 | 0.6126 | 0.6123 | 0.6121 | 0.6118 | 0.6116 | 0.6113 |
| 99 | 0.6111 | 0.6108 | 0.6106 | 0.6103 | 0.6101 | 0.6098 | 0.6096 | 0.6093 | 0.6091 | 0.6088 |
| 100 | 0.6086 | 0.6083 | 0.6081 | 0.6079 | 0.6076 | 0.6074 | 0.6071 | 0.6069 | 0.6067 | 0.6064 |
| 101 | 0.6062 | 0.6060 | 0.6057 | 0.6055 | 0.6053 | 0.6050 | 0.6048 | 0.6046 | 0.6044 | 0.6041 |
| 102 | 0.6039 | 0.6037 | 0.6035 | 0.6032 | 0.6030 | 0.6028 | 0.6026 | 0.6024 | 0.6021 | 0.6019 |
| 103 | 0.6017 | 0.6015 | 0.6013 | 0.6011 | 0.6009 | 0.6006 | 0.6004 | 0.6002 | 0.6000 | 0.5998 |
| 104 | 0.5996 | 0.5994 | 0.5992 | 0.5990 | 0.5988 | 0.5986 | 0.5984 | 0.5982 | 0.5980 | 0.5978 |
| 105 | 0.5976 | 0.5974 | 0.5972 | 0.5970 | 0.5968 | 0.5966 | 0.5964 | 0.5962 | 0.5960 | 0.5958 |
| 106 | 0.5956 | 0.5954 | 0.5952 | 0.5950 | 0.5948 | 0.5946 | 0.5945 | 0.5943 | 0.5941 | 0.5939 |
| 107 | 0.5937 | 0.5935 | 0.5933 | 0.5932 | 0.5930 | 0.5928 | 0.5926 | 0.5924 | 0.5923 | 0.5921 |
| 108 | 0.5919 | 0.5917 | 0.5916 | 0.5914 | 0.5912 | 0.5910 | 0.5909 | 0.5907 | 0.5905 | 0.5903 |
| 109 | 0.5902 | 0.5900 | 0.5898 | 0.5897 | 0.5895 | 0.5893 | 0.5892 | 0.5890 | 0.5888 | 0.5887 |
| 110 | 0.5885 | 0.5883 | 0.5882 | 0.5880 | 0.5878 | 0.5877 | 0.5875 | 0.5874 | 0.5872 | 0.5870 |
| 111 | 0.5869 | 0.5867 | 0.5866 | 0.5864 | 0.5863 | 0.5861 | 0.5860 | 0.5858 | 0.5856 | 0.5855 |
| 112 | 0.5853 | 0.5852 | 0.5850 | 0.5849 | 0.5847 | 0.5846 | 0.5844 | 0.5843 | 0.5841 | 0.5840 |
| 113 | 0.5839 | 0.5837 | 0.5836 | 0.5834 | 0.5833 | 0.5831 | 0.5830 | 0.5828 | 0.5827 | 0.5826 |
| 114 | 0.5824 | 0.5823 | 0.5821 | 0.5820 | 0.5819 | 0.5817 | 0.5816 | 0.5815 | 0.5813 | 0.5812 |
| 115 | 0.5811 | 0.5809 | 0.5808 | 0.5806 | 0.5805 | 0.5804 | 0.5803 | 0.5801 | 0.5800 | 0.5799 |
| 116 | 0.5797 | 0.5796 | 0.5795 | 0.5793 | 0.5792 | 0.5791 | 0.5790 | 0.5788 | 0.5787 | 0.5786 |
| 117 | 0.5785 | 0.5783 | 0.5782 | 0.5781 | 0.5780 | 0.5778 | 0.5777 | 0.5776 | 0.5775 | 0.5774 |
| 118 | 0.5772 | 0.5771 | 0.5770 | 0.5769 | 0.5768 | 0.5766 | 0.5765 | 0.5764 | 0.5763 | 0.5762 |
| 119 | 0.5761 | 0.5759 | 0.5758 | 0.5757 | 0.5756 | 0.5755 | 0.5754 | 0.5753 | 0.5751 | 0.5750 |
| 120 | 0.5749 | 0.5748 | 0.5747 | 0.5746 | 0.5745 | 0.5744 | 0.5743 | 0.5742 | 0.5740 | 0.5739 |
| 121 | 0.5738 | 0.5737 | 0.5736 | 0.5735 | 0.5734 | 0.5733 | 0.5732 | 0.5731 | 0.5730 | 0.5729 |
| 122 | 0.5728 | 0.5727 | 0.5726 | 0.5725 | 0.5724 | 0.5723 | 0.5722 | 0.5721 | 0.5720 | 0.5719 |
| 123 | 0.5718 | 0.5717 | 0.5716 | 0.5715 | 0.5714 | 0.5713 | 0.5712 | 0.5711 | 0.5710 | 0.5709 |
| 124 | 0.5708 | 0.5707 | 0.5706 | 0.5705 | 0.5704 | 0.5703 | 0.5702 | 0.5701 | 0.5700 | 0.5699 |
| 125 | 0.5698 | 0.5698 | 0.5697 | 0.5696 | 0.5695 | 0.5694 | 0.5693 | 0.5692 | 0.5691 | 0.5690 |

## WILKES FORMULA FOR MEN continued

| BW | 0 | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 126 | 0.5689 | 0.5688 | 0.5688 | 0.5687 | 0.5686 | 0.5685 | 0.5684 | 0.5683 | 0.5682 | 0.5681 |
| 127 | 0.5681 | 0.5680 | 0.5679 | 0.5678 | 0.5677 | 0.5676 | 0.5675 | 0.5675 | 0.5674 | 0.5673 |
| 128 | 0.5672 | 0.5671 | 0.5670 | 0.5670 | 0.5669 | 0.5668 | 0.5667 | 0.5666 | 0.5665 | 0.5665 |
| 129 | 0.5664 | 0.5663 | 0.5662 | 0.5661 | 0.5661 | 0.5660 | 0.5659 | 0.5658 | 0.5658 | 0.5657 |
| 130 | 0.5656 | 0.5655 | 0.5654 | 0.5654 | 0.5653 | 0.5652 | 0.5651 | 0.5651 | 0.5650 | 0.5649 |
| 131 | 0.5648 | 0.5647 | 0.5647 | 0.5646 | 0.5645 | 0.5644 | 0.5644 | 0.5643 | 0.5642 | 0.5642 |
| 132 | 0.5641 | 0.5640 | 0.5639 | 0.5639 | 0.5638 | 0.5637 | 0.5636 | 0.5636 | 0.5635 | 0.5634 |
| 133 | 0.5634 | 0.5633 | 0.5632 | 0.5631 | 0.5631 | 0.5630 | 0.5629 | 0.5629 | 0.5628 | 0.5627 |
| 134 | 0.5627 | 0.5626 | 0.5625 | 0.5624 | 0.5624 | 0.5623 | 0.5622 | 0.5622 | 0.5621 | 0.5620 |
| 135 | 0.5620 | 0.5619 | 0.5618 | 0.5618 | 0.5617 | 0.5616 | 0.5616 | 0.5615 | 0.5614 | 0.5614 |
| 136 | 0.5613 | 0.5612 | 0.5612 | 0.5611 | 0.5610 | 0.5610 | 0.5609 | 0.5609 | 0.5608 | 0.5607 |
| 137 | 0.5607 | 0.5606 | 0.5605 | 0.5605 | 0.5604 | 0.5603 | 0.5603 | 0.5602 | 0.5602 | 0.5601 |
| 138 | 0.5600 | 0.5600 | 0.5599 | 0.5598 | 0.5598 | 0.5597 | 0.5597 | 0.5596 | 0.5595 | 0.5595 |
| 139 | 0.5594 | 0.5593 | 0.5593 | 0.5592 | 0.5592 | 0.5591 | 0.5590 | 0.5590 | 0.5589 | 0.5589 |
| 140 | 0.5588 | 0.5587 | 0.5587 | 0.5586 | 0.5586 | 0.5585 | 0.5584 | 0.5584 | 0.5583 | 0.5583 |
| 141 | 0.5582 | 0.5582 | 0.5581 | 0.5580 | 0.5580 | 0.5579 | 0.5579 | 0.5578 | 0.5578 | 0.5577 |
| 142 | 0.5576 | 0.5576 | 0.5575 | 0.5575 | 0.5574 | 0.5573 | 0.5573 | 0.5572 | 0.5572 | 0.5571 |
| 143 | 0.5571 | 0.5570 | 0.5570 | 0.5569 | 0.5568 | 0.5568 | 0.5567 | 0.5567 | 0.5566 | 0.5566 |
| 144 | 0.5565 | 0.5564 | 0.5564 | 0.5563 | 0.5563 | 0.5562 | 0.5562 | 0.5561 | 0.5561 | 0.5560 |
| 145 | 0.5560 | 0.5559 | 0.5558 | 0.5558 | 0.5557 | 0.5557 | 0.5556 | 0.5556 | 0.5555 | 0.5555 |
| 146 | 0.5554 | 0.5554 | 0.5553 | 0.5552 | 0.5552 | 0.5551 | 0.5551 | 0.5550 | 0.5550 | 0.5549 |
| 147 | 0.5549 | 0.5548 | 0.5548 | 0.5547 | 0.5547 | 0.5546 | 0.5546 | 0.5545 | 0.5544 | 0.5544 |
| 148 | 0.5543 | 0.5543 | 0.5542 | 0.5542 | 0.5541 | 0.5541 | 0.5540 | 0.5540 | 0.5539 | 0.5539 |
| 149 | 0.5538 | 0.5538 | 0.5537 | 0.5537 | 0.5536 | 0.5536 | 0.5535 | 0.5535 | 0.5534 | 0.5533 |
| 150 | 0.5533 | 0.5532 | 0.5532 | 0.5531 | 0.5531 | 0.5530 | 0.5530 | 0.5529 | 0.5529 | 0.5528 |
| 151 | 0.5528 | 0.5527 | 0.5527 | 0.5526 | 0.5526 | 0.5525 | 0.5525 | 0.5524 | 0.5524 | 0.5523 |
| 152 | 0.5523 | 0.5522 | 0.5522 | 0.5521 | 0.5521 | 0.5520 | 0.5520 | 0.5519 | 0.5519 | 0.5518 |
| 153 | 0.5518 | 0.5517 | 0.5516 | 0.5516 | 0.5515 | 0.5515 | 0.5514 | 0.5514 | 0.5513 | 0.5513 |
| 154 | 0.5512 | 0.5512 | 0.5511 | 0.5511 | 0.5510 | 0.5510 | 0.5509 | 0.5509 | 0.5508 | 0.5508 |
| 155 | 0.5507 | 0.5507 | 0.5506 | 0.5506 | 0.5505 | 0.5505 | 0.5504 | 0.5504 | 0.5503 | 0.5503 |
| 156 | 0.5502 | 0.5502 | 0.5501 | 0.5501 | 0.5500 | 0.5500 | 0.5499 | 0.5499 | 0.5498 | 0.5498 |
| 157 | 0.5497 | 0.5497 | 0.5496 | 0.5496 | 0.5495 | 0.5495 | 0.5494 | 0.5494 | 0.5493 | 0.5493 |
| 158 | 0.5492 | 0.5492 | 0.5491 | 0.5491 | 0.5490 | 0.5490 | 0.5489 | 0.5489 | 0.5488 | 0.5488 |
| 159 | 0.5487 | 0.5487 | 0.5486 | 0.5486 | 0.5485 | 0.5485 | 0.5484 | 0.5484 | 0.5483 | 0.5483 |
| 160 | 0.5482 | 0.5482 | 0.5481 | 0.5481 | 0.5480 | 0.5480 | 0.5479 | 0.5479 | 0.5478 | 0.5478 |
| 161 | 0.5477 | 0.5477 | 0.5476 | 0.5476 | 0.5475 | 0.5475 | 0.5474 | 0.5474 | 0.5473 | 0.5472 |
| 162 | 0.5472 | 0.5471 | 0.5471 | 0.5470 | 0.5470 | 0.5469 | 0.5469 | 0.5468 | 0.5468 | 0.5467 |
| 163 | 0.5467 | 0.5466 | 0.5466 | 0.5465 | 0.5465 | 0.5464 | 0.5464 | 0.5463 | 0.5463 | 0.5462 |
| 164 | 0.5462 | 0.5461 | 0.5461 | 0.5460 | 0.5460 | 0.5459 | 0.5459 | 0.5458 | 0.5458 | 0.5457 |
| 165 | 0.5457 | 0.5456 | 0.5456 | 0.5455 | 0.5455 | 0.5454 | 0.5454 | 0.5453 | 0.5453 | 0.5452 |
| 166 | 0.5452 | 0.5451 | 0.5451 | 0.5450 | 0.5450 | 0.5449 | 0.5449 | 0.5448 | 0.5448 | 0.5447 |
| 167 | 0.5447 | 0.5446 | 0.5446 | 0.5445 | 0.5445 | 0.5444 | 0.5444 | 0.5443 | 0.5443 | 0.5442 |
| 168 | 0.5442 | 0.5441 | 0.5441 | 0.5440 | 0.5440 | 0.5439 | 0.5439 | 0.5438 | 0.5438 | 0.5437 |
| 169 | 0.5436 | 0.5436 | 0.5435 | 0.5435 | 0.5434 | 0.5434 | 0.5433 | 0.5433 | 0.5432 | 0.5432 |

## WILKES FORMULA FOR MEN continued

| BW | 0 | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 170 | 0.5431 | 0.5431 | 0.5430 | 0.5430 | 0.5429 | 0.5429 | 0.5428 | 0.5428 | 0.5427 | 0.5427 |
| 171 | 0.5426 | 0.5426 | 0.5425 | 0.5425 | 0.5424 | 0.5424 | 0.5423 | 0.5423 | 0.5422 | 0.5422 |
| 172 | 0.5421 | 0.5421 | 0.5420 | 0.5420 | 0.5419 | 0.5419 | 0.5418 | 0.5418 | 0.5417 | 0.5417 |
| 173 | 0.5416 | 0.5416 | 0.5415 | 0.5415 | 0.5414 | 0.5414 | 0.5413 | 0.5413 | 0.5412 | 0.5412 |
| 174 | 0.5411 | 0.5411 | 0.5410 | 0.5410 | 0.5409 | 0.5409 | 0.5408 | 0.5408 | 0.5407 | 0.5407 |
| 175 | 0.5406 | 0.5406 | 0.5405 | 0.5405 | 0.5404 | 0.5404 | 0.5403 | 0.5403 | 0.5402 | 0.5402 |
| 176 | 0.5401 | 0.5401 | 0.5400 | 0.5400 | 0.5399 | 0.5399 | 0.5398 | 0.5398 | 0.5397 | 0.5397 |
| 177 | 0.5396 | 0.5396 | 0.5395 | 0.5395 | 0.5394 | 0.5394 | 0.5393 | 0.5393 | 0.5392 | 0.5392 |
| 178 | 0.5391 | 0.5391 | 0.5390 | 0.5390 | 0.5389 | 0.5389 | 0.5388 | 0.5388 | 0.5387 | 0.5387 |
| 179 | 0.5387 | 0.5386 | 0.5386 | 0.5385 | 0.5385 | 0.5384 | 0.5384 | 0.5383 | 0.5383 | 0.5382 |
|  |  |  |  |  |  |  |  |  |  |  |
| 180 | 0.5382 | 0.5381 | 0.5381 | 0.5380 | 0.5380 | 0.5379 | 0.5379 | 0.5378 | 0.5378 | 0.5377 |
| 181 | 0.5377 | 0.5377 | 0.5376 | 0.5376 | 0.5375 | 0.5375 | 0.5374 | 0.5374 | 0.5373 | 0.5373 |
| 182 | 0.5372 | 0.5372 | 0.5371 | 0.5371 | 0.5371 | 0.5370 | 0.5370 | 0.5369 | 0.5369 | 0.5368 |
| 183 | 0.5368 | 0.5367 | 0.5367 | 0.5366 | 0.5366 | 0.5366 | 0.5365 | 0.5365 | 0.5364 | 0.5364 |
| 184 | 0.5363 | 0.5363 | 0.5362 | 0.5362 | 0.5362 | 0.5361 | 0.5361 | 0.5360 | 0.5360 | 0.5359 |
| 185 | 0.5359 | 0.5359 | 0.5358 | 0.5358 | 0.5357 | 0.5357 | 0.5356 | 0.5356 | 0.5356 | 0.5355 |
| 186 | 0.5355 | 0.5354 | 0.5354 | 0.5353 | 0.5353 | 0.5353 | 0.5352 | 0.5352 | 0.5351 | 0.5351 |
| 187 | 0.5351 | 0.5350 | 0.5350 | 0.5349 | 0.5349 | 0.5349 | 0.5348 | 0.5348 | 0.5347 | 0.5347 |
| 188 | 0.5347 | 0.5346 | 0.5346 | 0.5345 | 0.5345 | 0.5345 | 0.5344 | 0.5344 | 0.5344 | 0.5343 |
| 189 | 0.5343 | 0.5342 | 0.5342 | 0.5342 | 0.5341 | 0.5341 | 0.5341 | 0.5340 | 0.5340 | 0.5340 |
|  |  |  |  |  |  |  |  |  |  |  |
| 190 | 0.5339 | 0.5339 | 0.5338 | 0.5338 | 0.5338 | 0.5337 | 0.5337 | 0.5337 | 0.5336 | 0.5336 |
| 191 | 0.5336 | 0.5335 | 0.5335 | 0.5335 | 0.5334 | 0.5334 | 0.5334 | 0.5333 | 0.5333 | 0.5333 |
| 192 | 0.5332 | 0.5332 | 0.5332 | 0.5332 | 0.5331 | 0.5331 | 0.5331 | 0.5330 | 0.5330 | 0.5330 |
| 193 | 0.5329 | 0.5329 | 0.5329 | 0.5329 | 0.5328 | 0.5328 | 0.5328 | 0.5327 | 0.5327 | 0.5327 |
| 194 | 0.5327 | 0.5326 | 0.5326 | 0.5326 | 0.5326 | 0.5325 | 0.5325 | 0.5325 | 0.5325 | 0.5324 |
| 195 | 0.5324 | 0.5324 | 0.5324 | 0.5323 | 0.5323 | 0.5323 | 0.5323 | 0.5322 | 0.5322 | 0.5322 |
| 196 | 0.5322 | 0.5322 | 0.5321 | 0.5321 | 0.5321 | 0.5321 | 0.5321 | 0.5320 | 0.5320 | 0.5320 |
| 197 | 0.5320 | 0.5320 | 0.5319 | 0.5319 | 0.5319 | 0.5319 | 0.5319 | 0.5319 | 0.5318 | 0.5318 |
| 198 | 0.5318 | 0.5318 | 0.5318 | 0.5318 | 0.5318 | 0.5317 | 0.5317 | 0.5317 | 0.5317 | 0.5317 |
| 199 | 0.5317 | 0.5317 | 0.5317 | 0.5317 | 0.5316 | 0.5316 | 0.5316 | 0.5316 | 0.5316 | 0.5316 |
|  |  |  |  |  |  |  |  |  |  |  |
| 200 | 0.5316 | 0.5316 | 0.5316 | 0.5316 | 0.5316 | 0.5315 | 0.5315 | 0.5315 | 0.5315 | 0.5315 |
| 201 | 0.5315 | 0.5315 | 0.5315 | 0.5315 | 0.5315 | 0.5315 | 0.5315 | 0.5315 | 0.5315 | 0.5315 |
| 202 | 0.5315 | 0.5315 | 0.5315 | 0.5315 | 0.5315 | 0.5315 | 0.5315 | 0.5315 | 0.5315 | 0.5315 |
| 203 | 0.5315 | 0.5315 | 0.5315 | 0.5315 | 0.5315 | 0.5315 | 0.5316 | 0.5316 | 0.5316 | 0.5316 |
| 204 | 0.5316 | 0.5316 | 0.5316 | 0.5316 | 0.5316 | 0.5316 | 0.5316 | 0.5317 | 0.5317 | 0.5317 |
| 205 | 0.5317 | 0.5317 | 0.5317 | 0.5317 | 0.5318 | 0.5318 | 0.5318 | 0.5318 | 0.5318 | 0.5318 |

## WILKES FORMULA FOR WOMEN

| BW | 0 | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 40 | 1.4936 | 1.4915 | 1.4894 | 1.4872 | 1.4851 | 1.4830 | 1.4809 | 1.4788 | 1.4766 | 1.4745 |
| 41 | 1.4724 | 1.4702 | 1.4681 | 1.4660 | 1.4638 | 1.4617 | 1.4595 | 1.4574 | 1.4552 | 1.4531 |
| 42 | 1.4510 | 1.4488 | 1.4467 | 1.4445 | 1.4424 | 1.4402 | 1.4381 | 1.4359 | 1.4338 | 1.4316 |
| 43 | 1.4295 | 1.4273 | 1.4252 | 1.4231 | 1.4209 | 1.4188 | 1.4166 | 1.4145 | 1.4123 | 1.4102 |
| 44 | 1.4081 | 1.4059 | 1.4038 | 1.4017 | 1.3995 | 1.3974 | 1.3953 | 1.3932 | 1.3910 | 1.3889 |
| 45 | 1.3868 | 1.3847 | 1.3825 | 1.3804 | 1.3783 | 1.3762 | 1.3741 | 1.3720 | 1.3699 | 1.3678 |
| 46 | 1.3657 | 1.3636 | 1.3615 | 1.3594 | 1.3573 | 1.3553 | 1.3532 | 1.3511 | 1.3490 | 1.3470 |
| 47 | 1.3449 | 1.3428 | 1.3408 | 1.3387 | 1.3367 | 1.3346 | 1.3326 | 1.3305 | 1.3285 | 1.3265 |
| 48 | 1.3244 | 1.3224 | 1.3204 | 1.3183 | 1.3163 | 1.3143 | 1.3123 | 1.3103 | 1.3083 | 1.3063 |
| 49 | 1.3043 | 1.3023 | 1.3004 | 1.2984 | 1.2964 | 1.2944 | 1.2925 | 1.2905 | 1.2885 | 1.2866 |
| 50 | 1.2846 | 1.2827 | 1.2808 | 1.2788 | 1.2769 | 1.2750 | 1.2730 | 1.2711 | 1.2692 | 1.2673 |
| 51 | 1.2654 | 1.2635 | 1.2616 | 1.2597 | 1.2578 | 1.2560 | 1.2541 | 1.2522 | 1.2504 | 1.2485 |
| 52 | 1.2466 | 1.2448 | 1.2429 | 1.2411 | 1.2393 | 1.2374 | 1.2356 | 1.2338 | 1.2320 | 1.2302 |
| 53 | 1.2284 | 1.2266 | 1.2248 | 1.2230 | 1.2212 | 1.2194 | 1.2176 | 1.2159 | 1.2141 | 1.2123 |
| 54 | 1.2106 | 1.2088 | 1.2071 | 1.2054 | 1.2036 | 1.2019 | 1.2002 | 1.1985 | 1.1967 | 1.1950 |
| 55 | 1.1933 | 1.1916 | 1.1900 | 1.1883 | 1.1866 | 1.1849 | 1.1832 | 1.1816 | 1.1799 | 1.1783 |
| 56 | 1.1766 | 1.1750 | 1.1733 | 1.1717 | 1.1701 | 1.1684 | 1.1668 | 1.1652 | 1.1636 | 1.1620 |
| 57 | 1.1604 | 1.1588 | 1.1572 | 1.1556 | 1.1541 | 1.1525 | 1.1509 | 1.1494 | 1.1478 | 1.1463 |
| 58 | 1.1447 | 1.1432 | 1.1416 | 1.1401 | 1.1386 | 1.1371 | 1.1355 | 1.1340 | 1.1325 | 1.1310 |
| 59 | 1.1295 | 1.1281 | 1.1266 | 1.1251 | 1.1236 | 1.1221 | 1.1207 | 1.1192 | 1.1178 | 1.1163 |
| 60 | 1.1149 | 1.1134 | 1.1120 | 1.1106 | 1.1092 | 1.1078 | 1.1063 | 1.1049 | 1.1035 | 1.1021 |
| 61 | 1.1007 | 1.0994 | 1.0980 | 1.0966 | 1.0952 | 1.0939 | 1.0925 | 1.0911 | 1.0898 | 1.0884 |
| 62 | 1.0871 | 1.0858 | 1.0844 | 1.0831 | 1.0818 | 1.0805 | 1.0792 | 1.0779 | 1.0765 | 1.0753 |
| 63 | 1.0740 | 1.0727 | 1.0714 | 1.0701 | 1.0688 | 1.0676 | 1.0663 | 1.0650 | 1.0638 | 1.0625 |
| 64 | 1.0613 | 1.0601 | 1.0588 | 1.0576 | 1.0564 | 1.0551 | 1.0539 | 1.0527 | 1.0515 | 1.0503 |
| 65 | 1.0491 | 1.0479 | 1.0467 | 1.0455 | 1.0444 | 1.0432 | 1.0420 | 1.0408 | 1.0397 | 1.0385 |
| 66 | 1.0374 | 1.0362 | 1.0351 | 1.0339 | 1.0328 | 1.0317 | 1.0306 | 1.0294 | 1.0283 | 1.0272 |
| 67 | 1.0261 | 1.0250 | 1.0239 | 1.0228 | 1.0217 | 1.0206 | 1.0195 | 1.0185 | 1.0174 | 1.0163 |
| 68 | 1.0153 | 1.0142 | 1.0131 | 1.0121 | 1.0110 | 1.0100 | 1.0090 | 1.0079 | 1.0069 | 1.0059 |
| 69 | 1.0048 | 1.0038 | 1.0028 | 1.0018 | 1.0008 | 0.9998 | 0.9988 | 0.9978 | 0.9968 | 0.9958 |
| 70 | 0.9948 | 0.9939 | 0.9929 | 0.9919 | 0.9910 | 0.9900 | 0.9890 | 0.9881 | 0.9871 | 0.9862 |
| 71 | 0.9852 | 0.9843 | 0.9834 | 0.9824 | 0.9815 | 0.9806 | 0.9797 | 0.9788 | 0.9779 | 0.9769 |
| 72 | 0.9760 | 0.9751 | 0.9742 | 0.9734 | 0.9725 | 0.9716 | 0.9707 | 0.9698 | 0.9689 | 0.9681 |
| 73 | 0.9672 | 0.9663 | 0.9655 | 0.9646 | 0.9638 | 0.9629 | 0.9621 | 0.9613 | 0.9604 | 0.9596 |
| 74 | 0.9587 | 0.9579 | 0.9571 | 0.9563 | 0.9555 | 0.9547 | 0.9538 | 0.9530 | 0.9522 | 0.9514 |
| 75 | 0.9506 | 0.9498 | 0.9491 | 0.9483 | 0.9475 | 0.9467 | 0.9459 | 0.9452 | 0.9444 | 0.9436 |
| 76 | 0.9429 | 0.9421 | 0.9414 | 0.9406 | 0.9399 | 0.9391 | 0.9384 | 0.9376 | 0.9369 | 0.9362 |
| 77 | 0.9354 | 0.9347 | 0.9340 | 0.9333 | 0.9326 | 0.9318 | 0.9311 | 0.9304 | 0.9297 | 0.9290 |
| 78 | 0.9283 | 0.9276 | 0.9269 | 0.9263 | 0.9256 | 0.9249 | 0.9242 | 0.9235 | 0.9229 | 0.9222 |
| 79 | 0.9215 | 0.9209 | 0.9202 | 0.9195 | 0.9189 | 0.9182 | 0.9176 | 0.9169 | 0.9163 | 0.9156 |
|  |  |  |  |  |  |  |  |  |  |  |
| 80 | 0.9150 | 0.9144 | 0.9137 | 0.9131 | 0.9125 | 0.9119 | 0.9112 | 0.9106 | 0.9100 | 0.9094 |
| 81 | 0.9088 | 0.9082 | 0.9076 | 0.9070 | 0.9064 | 0.9058 | 0.9052 | 0.9046 | 0.9040 | 0.9034 |
| 82 | 0.9028 | 0.9023 | 0.9017 | 0.9011 | 0.9005 | 0.9000 | 0.8994 | 0.8988 | 0.8983 | 0.8977 |

WILKES FORMULA FOR WOMEN continued

| BW | 0 | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 83 | 0.8972 | 0.8966 | 0.8961 | 0.8955 | 0.8950 | 0.8944 | 0.8939 | 0.8933 | 0.8928 | 0.8923 |
| 84 | 0.8917 | 0.8912 | 0.8907 | 0.8902 | 0.8896 | 0.8891 | 0.8886 | 0.8881 | 0.8876 | 0.8871 |
| 85 | 0.8866 | 0.8861 | 0.8856 | 0.8851 | 0.8846 | 0.8841 | 0.8836 | 0.8831 | 0.8826 | 0.8821 |
| 86 | 0.8816 | 0.8811 | 0.8807 | 0.8802 | 0.8797 | 0.8792 | 0.8788 | 0.8783 | 0.8778 | 0.8774 |
| 87 | 0.8769 | 0.8765 | 0.8760 | 0.8755 | 0.8751 | 0.8746 | 0.8742 | 0.8737 | 0.8733 | 0.8729 |
| 88 | 0.8724 | 0.8720 | 0.8716 | 0.8711 | 0.8707 | 0.8703 | 0.8698 | 0.8694 | 0.8690 | 0.8686 |
| 89 | 0.8681 | 0.8677 | 0.8673 | 0.8669 | 0.8665 | 0.8661 | 0.8657 | 0.8653 | 0.8649 | 0.8645 |
|  |  |  |  |  |  |  |  |  |  |  |
| 90 | 0.8641 | 0.8637 | 0.8633 | 0.8629 | 0.8625 | 0.8621 | 0.8617 | 0.8613 | 0.8609 | 0.8606 |
| 91 | 0.8602 | 0.8598 | 0.8594 | 0.8590 | 0.8587 | 0.8583 | 0.8579 | 0.8576 | 0.8572 | 0.8568 |
| 92 | 0.8565 | 0.8561 | 0.8558 | 0.8554 | 0.8550 | 0.8547 | 0.8543 | 0.8540 | 0.8536 | 0.8533 |
| 93 | 0.8530 | 0.8526 | 0.8523 | 0.8519 | 0.8516 | 0.8513 | 0.8509 | 0.8506 | 0.8503 | 0.8499 |
| 94 | 0.8496 | 0.8493 | 0.8489 | 0.8486 | 0.8483 | 0.8480 | 0.8477 | 0.8473 | 0.8470 | 0.8467 |
| 95 | 0.8464 | 0.8461 | 0.8458 | 0.8455 | 0.8452 | 0.8449 | 0.8446 | 0.8443 | 0.8440 | 0.8437 |
| 96 | 0.8434 | 0.8431 | 0.8428 | 0.8425 | 0.8422 | 0.8419 | 0.8416 | 0.8413 | 0.8410 | 0.8407 |
| 97 | 0.8405 | 0.8402 | 0.8399 | 0.8396 | 0.8393 | 0.8391 | 0.8388 | 0.8385 | 0.8382 | 0.8380 |
| 98 | 0.8377 | 0.8374 | 0.8372 | 0.8369 | 0.8366 | 0.8364 | 0.8361 | 0.8359 | 0.8356 | 0.8353 |
| 99 | 0.8351 | 0.8348 | 0.8346 | 0.8343 | 0.8341 | 0.8338 | 0.8336 | 0.8333 | 0.8331 | 0.8328 |
|  |  |  |  |  |  |  |  |  |  |  |
| 100 | 0.8326 | 0.8323 | 0.8321 | 0.8319 | 0.8316 | 0.8314 | 0.8311 | 0.8309 | 0.8307 | 0.8304 |
| 101 | 0.8302 | 0.8300 | 0.8297 | 0.8295 | 0.8293 | 0.8291 | 0.8288 | 0.8286 | 0.8284 | 0.8282 |
| 102 | 0.8279 | 0.8277 | 0.8275 | 0.8273 | 0.8271 | 0.8268 | 0.8266 | 0.8264 | 0.8262 | 0.8260 |
| 103 | 0.8258 | 0.8256 | 0.8253 | 0.8251 | 0.8249 | 0.8247 | 0.8245 | 0.8243 | 0.8241 | 0.8239 |
| 104 | 0.8237 | 0.8235 | 0.8233 | 0.8231 | 0.8229 | 0.8227 | 0.8225 | 0.8223 | 0.8221 | 0.8219 |
| 105 | 0.8217 | 0.8215 | 0.8214 | 0.8212 | 0.8210 | 0.8208 | 0.8206 | 0.8204 | 0.8202 | 0.8200 |
| 106 | 0.8198 | 0.8197 | 0.8195 | 0.8193 | 0.8191 | 0.8189 | 0.8188 | 0.8186 | 0.8184 | 0.8182 |
| 107 | 0.8180 | 0.8179 | 0.8177 | 0.8175 | 0.8173 | 0.8172 | 0.8170 | 0.8168 | 0.8167 | 0.8165 |
| 108 | 0.8163 | 0.8161 | 0.8160 | 0.8158 | 0.8156 | 0.8155 | 0.8153 | 0.8152 | 0.8150 | 0.8148 |
| 109 | 0.8147 | 0.8145 | 0.8143 | 0.8142 | 0.8140 | 0.8139 | 0.8137 | 0.8135 | 0.8134 | 0.8132 |
|  |  |  |  |  |  |  |  |  |  |  |
| 110 | 0.8131 | 0.8129 | 0.8128 | 0.8126 | 0.8124 | 0.8123 | 0.8121 | 0.8120 | 0.8118 | 0.8117 |
| 111 | 0.8115 | 0.8114 | 0.8112 | 0.8111 | 0.8109 | 0.8108 | 0.8106 | 0.8105 | 0.8103 | 0.8102 |
| 112 | 0.8101 | 0.8099 | 0.8098 | 0.8096 | 0.8095 | 0.8093 | 0.8092 | 0.8090 | 0.8089 | 0.8088 |
| 113 | 0.8086 | 0.8085 | 0.8083 | 0.8082 | 0.8081 | 0.8079 | 0.8078 | 0.8077 | 0.8075 | 0.8074 |
| 114 | 0.8072 | 0.8071 | 0.8070 | 0.8068 | 0.8067 | 0.8066 | 0.8064 | 0.8063 | 0.8062 | 0.8060 |
| 115 | 0.8059 | 0.8058 | 0.8056 | 0.8055 | 0.8054 | 0.8052 | 0.8051 | 0.8050 | 0.8049 | 0.8047 |
| 116 | 0.8046 | 0.8045 | 0.8043 | 0.8042 | 0.8041 | 0.8040 | 0.8038 | 0.8037 | 0.8036 | 0.8034 |
| 117 | 0.8033 | 0.8032 | 0.8031 | 0.8029 | 0.8028 | 0.8027 | 0.8026 | 0.8024 | 0.8023 | 0.8022 |
| 118 | 0.8021 | 0.8020 | 0.8018 | 0.8017 | 0.8016 | 0.8015 | 0.8013 | 0.8012 | 0.8011 | 0.8010 |
| 119 | 0.8009 | 0.8007 | 0.8006 | 0.8005 | 0.8004 | 0.8003 | 0.8001 | 0.8000 | 0.7999 | 0.7998 |
|  |  |  |  |  |  |  |  |  |  |  |
| 120 | 0.7997 | 0.7995 | 0.7994 | 0.7993 | 0.7992 | 0.7991 | 0.7989 | 0.7988 | 0.7987 | 0.7986 |
| 121 | 0.7985 | 0.7984 | 0.7982 | 0.7981 | 0.7980 | 0.7979 | 0.7978 | 0.7977 | 0.7975 | 0.7974 |
| 122 | 0.7973 | 0.7972 | 0.7971 | 0.7970 | 0.7969 | 0.7967 | 0.7966 | 0.7965 | 0.7964 | 0.7963 |
| 123 | 0.7962 | 0.7960 | 0.7959 | 0.7958 | 0.7957 | 0.7956 | 0.7955 | 0.7954 | 0.7953 | 0.7951 |
| 124 | 0.7950 | 0.7949 | 0.7948 | 0.7947 | 0.7946 | 0.7945 | 0.7943 | 0.7942 | 0.7941 | 0.7940 |
| 125 | 0.7939 | 0.7938 | 0.7937 | 0.7936 | 0.7934 | 0.7933 | 0.7932 | 0.7931 | 0.7930 | 0.7929 |

WILKES FORMULA FOR WOMEN continued

| BW | $\boldsymbol{0}$ | $\mathbf{0 . 1}$ | $\mathbf{0 . 2}$ | $\mathbf{0 . 3}$ | $\mathbf{0 . 4}$ | $\mathbf{0 . 5}$ | $\mathbf{0 . 6}$ | $\mathbf{0 . 7}$ | $\mathbf{0 . 8}$ | $\mathbf{0 . 9}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 126 | 0.7928 | 0.7927 | 0.7926 | 0.7924 | 0.7923 | 0.7922 | 0.7921 | 0.7920 | 0.7919 | 0.7918 |
| 127 | 0.7917 | 0.7915 | 0.7914 | 0.7913 | 0.7912 | 0.7911 | 0.7910 | 0.7909 | 0.7908 | 0.7907 |
| 128 | 0.7905 | 0.7904 | 0.7903 | 0.7902 | 0.7901 | 0.7900 | 0.7899 | 0.7898 | 0.7897 | 0.7895 |
| 129 | 0.7894 | 0.7893 | 0.7892 | 0.7891 | 0.7890 | 0.7889 | 0.7888 | 0.7887 | 0.7886 | 0.7884 |
|  |  |  |  |  |  |  |  |  |  |  |
| 130 | 0.7883 | 0.7882 | 0.7881 | 0.7880 | 0.7879 | 0.7878 | 0.7877 | 0.7876 | 0.7875 | 0.7873 |
| 131 | 0.7872 | 0.7871 | 0.7870 | 0.7869 | 0.7868 | 0.7867 | 0.7866 | 0.7865 | 0.7864 | 0.7862 |
| 132 | 0.7861 | 0.7860 | 0.7859 | 0.7858 | 0.7857 | 0.7856 | 0.7855 | 0.7854 | 0.7853 | 0.7852 |
| 133 | 0.7850 | 0.7849 | 0.7848 | 0.7847 | 0.7846 | 0.7845 | 0.7844 | 0.7843 | 0.7842 | 0.7841 |
| 134 | 0.7840 | 0.7838 | 0.7837 | 0.7836 | 0.7835 | 0.7834 | 0.7833 | 0.7832 | 0.7831 | 0.7830 |
| 135 | 0.7829 | 0.7828 | 0.7827 | 0.7825 | 0.7824 | 0.7823 | 0.7822 | 0.7821 | 0.7820 | 0.7819 |
| 136 | 0.7818 | 0.7817 | 0.7816 | 0.7815 | 0.7814 | 0.7813 | 0.7812 | 0.7811 | 0.7809 | 0.7808 |
| 137 | 0.7807 | 0.7806 | 0.7805 | 0.7804 | 0.7803 | 0.7802 | 0.7801 | 0.7800 | 0.7799 | 0.7798 |
| 138 | 0.7797 | 0.7796 | 0.7795 | 0.7794 | 0.7793 | 0.7792 | 0.7791 | 0.7790 | 0.7789 | 0.7787 |
| 139 | 0.7786 | 0.7785 | 0.7784 | 0.7783 | 0.7782 | 0.7781 | 0.7780 | 0.7779 | 0.7778 | 0.7777 |
|  |  |  |  |  |  |  |  |  |  |  |
| 140 | 0.7776 | 0.7775 | 0.7774 | 0.7773 | 0.7772 | 0.7771 | 0.7770 | 0.7769 | 0.7768 | 0.7767 |
| 141 | 0.7766 | 0.7765 | 0.7764 | 0.7763 | 0.7762 | 0.7761 | 0.7760 | 0.7759 | 0.7759 | 0.7758 |
| 142 | 0.7757 | 0.7756 | 0.7755 | 0.7754 | 0.7753 | 0.7752 | 0.7751 | 0.7750 | 0.7749 | 0.7748 |
| 143 | 0.7747 | 0.7746 | 0.7745 | 0.7744 | 0.7744 | 0.7743 | 0.7742 | 0.7741 | 0.7740 | 0.7739 |
| 144 | 0.7738 | 0.7737 | 0.7736 | 0.7736 | 0.7735 | 0.7734 | 0.7733 | 0.7732 | 0.7731 | 0.7730 |
| 145 | 0.7730 | 0.7729 | 0.7728 | 0.7727 | 0.7726 | 0.7725 | 0.7725 | 0.7724 | 0.7723 | 0.7722 |
| 146 | 0.7721 | 0.7721 | 0.7720 | 0.7719 | 0.7718 | 0.7717 | 0.7717 | 0.7716 | 0.7715 | 0.7714 |
| 147 | 0.7714 | 0.7713 | 0.7712 | 0.7712 | 0.7711 | 0.7710 | 0.7709 | 0.7709 | 0.7708 | 0.7707 |
| 148 | 0.7707 | 0.7706 | 0.7705 | 0.7705 | 0.7704 | 0.7703 | 0.7703 | 0.7702 | 0.7702 | 0.7701 |
| 149 | 0.7700 | 0.7700 | 0.7699 | 0.7699 | 0.7698 | 0.7698 | 0.7697 | 0.7696 | 0.7696 | 0.7695 |
|  |  |  |  |  |  |  |  |  |  |  |
| 150 | 0.7695 | 0.7694 | 0.7694 | 0.7693 | 0.7693 | 0.7692 | 0.7692 | 0.7691 | 0.7691 | 0.7691 |

## KILO CONVERSION TABLE

To convert kilos to pounds, multiply kilos by 2.2046. Rules state that poundages shall be rounded off by reducing to the nearest quarter, i.e., 107.5 kilos multiplied by 2.2046 equals 236.99450 . The poundage then becomes 236-3/4 rather than 237 .

| KILOS | POUNDS | KILOS | POUNDS | KILOS | POUNDS | KILOS | POUNDS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 27.5 | 60.5 | 145 | 319.5 | 260 | 573 | 377.5 | 832 |
| 30 | 66 | 147.5 | 325 | 262.5 | 578.5 | 380 | 837.5 |
| 32.5 | 71.5 | 150 | 330.5 | 265 | 584 | 382.5 | 843-1/4 |
| 35 | 77 | 152.5 | 336 | 267.5 | 598.5 | 385 | 848-3/4 |
| 37.5 | 82.5 | 155 | 341.5 | 270 | 595 | 387.5 | 854-1/4 |
| 40 | 88 | 157.5 | 347 | 272.5 | 600-3/4 | 390 | 859-3/4 |
| 42.5 | 93.5 | 160 | 352.5 | 275 | 606-1/4 | 392.5 | 865-1/4 |
| 45 | 99 | 162.5 | 358 | 277.5 | 611-3/4 | 395 | 870-3/4 |
| 47.5 | 104.5 | 165 | 363-3/4 | 280 | 617-1/4 | 397.5 | 876-1/4 |
| 50 | 110 | 167.5 | 369-1/4 | 282.5 | 622-3/4 | 400 | 881-3/4 |
| 52.5 | 115.5 | 170 | 374-3/4 | 285 | 628-1/4 | 402.5 | 887-1/4 |
| 55 | 121-1/4 | 172.5 | 380-1/4 | 287.5 | 633-3/4 | 405 | 892-3/4 |
| 57.5 | 126-3/4 | 175 | 385-3/4 | 290 | 639-1/4 | 407.5 | 898-1/4 |
| 60 | 132-1/4 | 177.5 | 391-1/4 | 292.5 | 644-3/4 | 410 | 903-3/4 |
| 62.5 | 137-3/4 | 180 | 396-3/4 | 295 | 650-1/4 | 412.5 | 909-1/4 |
| 65 | 143-1/4 | 182.5 | 402-1/4 | 297.5 | 655-3/4 | 415 | 814-3/4 |
| 67.5 | 148-3/4 | 185 | 407-3/4 | 300 | 661-1/4 | 417.5 | 920-1/4 |
| 70 | 154-1/4 | 187.5 | 413-1/4 | 302.5 | 666-3/4 | 420 | 925-3/4 |
| 72.5 | 159-3/4 | 190 | 418-3/4 | 305 | 672-1/4 | 422.5 | 931-1/4 |
| 75 | 165-1/4 | 192.5 | 424-1/4 | 307.5 | 677-3/4 | 425 | 936-3/4 |
| 77.5 | 170-3/4 | 195 | 429-3/4 | 310 | 683-1/4 | 427.5 | 942-1/4 |
| 80 | 176-3/4 | 197.5 | 435-1/4 | 312.5 | 688-3/4 | 430 | 947-3/4 |
| 82.5 | 181-3/4 | 200 | 440-3/4 | 315 | 694-1/4 | 432.5 | 953-1/4 |
| 85 | 187-1/4 | 202.5 | 446-1/4 | 317.5 | 699-3/4 | 435 | 959 |
| 87.5 | 192-3/4 | 205 | 451-3/4 | 320 | 705-1/4 | 437.5 | 964.5 |
| 90 | 198-1/4 | 207.5 | 457-1/4 | 322.5 | 710-3/4 | 440 | 970 |
| 92.5 | 203-3/4 | 210 | 462-3/4 | 325 | 716-1/4 | 442.5 | 975.5 |
| 95 | 209-1/4 | 212.5 | 468-1/4 | 327.5 | 722 | 445 | 981 |
| 97.5 | 214-3/4 | 215 | 473-3/4 | 330 | 727.5 | 447.5 | 986.5 |
| 100 | 220-1/4 | 217.5 | 479.5 | 332.5 | 733 | 450 | 992 |
| 102.5 | 225-3/4 | 220 | 485 | 335 | 738.5 | 452.5 | 99705 |
| 105 | 231-1/4 | 222.5 | 490.5 | 337.5 | 744 | 455 | 1003 |
| 107.5 | 236-3/4 | 225 | 496 | 340 | 749.5 | 457.5 | 1008.5 |
| 110 | 242.5 | 227.5 | 501.5 | 342.5 | 755 | 460 | 1014 |
| 115 | 253.5 | 230 | 507 | 345 | 760.5 | 462.5 | 1019.5 |
| 117.5 | 259 | 232.5 | 512.5 | 347.5 | 766 | 465 | 1025 |
| 120 | 264.5 | 235 | 518555 | 350 | 771.5 | 467.5 | 1030.5 |
| 122.5 | 270 | 237.5 | 523.5 | 352.5 | 777 | 470 | 1036 |
| 125 | 275.5 | 240 | 529 | 355 | 782.5 | 472.5 | 1041.5 |
| 127.5 | 281 | 242.5 | 534.5 | 357.5 | 788 | 475 | 1047 |
| 130 | 286.5 | 245 | 540 | 360 | 793.5 | 477.5 | 1052.5 |
| 132.5 | 292 | 247.5 | 545.5 | 362.5 | 799 | 480 | 1058 |
| 135 | 297.5 | 250 | 551 | 367.5 | 810 | 482.5 | 1063.5 |
| 137.5 | 303 | 252.5 | 556.5 | 370 | 815.5 | 485 | 1069 |
| 140 | 308.5 | 255 | 562 | 372.5 | 821 | 487.5 | 1074.5 |
| 142.5 | 314 | 257.5 | 567.5 | 375 | 826.5 | 490 | 1080-1/4 |


| KILOS | POUNDS | KILOS | POUNDS | KILOS | POUNDS | KILOS | POUNDS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 492.5 | 1085-3/4 | 622.5 | 1372-1/4 | 750 | 1653-1/4 | 877.5 | 1934-1/2 |
| 495 | 1091-1/4 | 625 | 1377-3/4 | 752.5 | 1658-3/4 | 880 | 1940 |
| 497.5 | 1096-3/4 | 627.5 | 1383-1/4 | 755 | 1664-1/4 | 882.5 | 1945-1/2 |
| 500 | 1102-1/4 | 630 | 1388-3/4 | 757.5 | 1669-3/4 | 885 | 1951 |
| 502.5 | 1107-3/4 | 632.5 | 1394-1/4 | 760 | 1675-1/4 | 887.5 | 1956-1/2 |
| 505 | 1113-1/4 | 635 | 1399-3/4 | 762.5 | 1681 | 890 | 1962 |
| 510 | 1124-1/4 | 637.5 | 1405-1/4 | 765 | 1686-1/2 | 892.5 | 1967-1/2 |
| 512.5 | 1129-3/4 | 640 | 1410-3/4 | 767.5 | 1692 | 895 | 1973 |
| 515 | 1135-1/4 | 642.5 | 1416-1/4 | 770 | 1697-1/2 | 897.5 | 1978-1/2 |
| 517.5 | 1140-3/4 | 645 | 1421-3/4 | 772.5 | 1703 | 900 | 1984 |
| 520 | 1146-1/4 | 647.5 | 1427-1/4 | 775 | 1708-1/2 | 902.5 | 1989-1/2 |
| 522.5 | 1151-3/4 | 650 | 1432-3/4 | 777.5 | 1714 | 905 | 1995 |
| 525 | 1157-1/4 | 652.5 | 1438-1/2 | 780 | 1719-1/2 | 907.5 | 2000-1/2 |
| 527.5 | 1162-3/4 | 655 | 1444 | 782.5 | 1725 | 910 | 2006 |
| 530 | 1168-1/4 | 657.5 | 1449-1/2 | 785 | 1730-1/2 | 912.5 | 2011-1/2 |
| 532.5 | 1173-3/4 | 660 | 1455 | 787.5 | 1736 | 915 | 2017 |
| 535 | 1179-1/4 | 662.5 | 1460-1/2 | 790 | 1741-42 | 917.5 | 2022-1/2 |
| 537.5 | 1184-3/4 | 665 | 1466 | 792.5 | 1747 | 920 | 2028 |
| 540 | 1190-1/4 | 667.5 | 1471-1/2 | 795 | 1752-1/2 | 922.5 | 2033-1/2 |
| 542.5 | 1195-1/4 | 670 | 1477 | 797.5 | 1758 | 925 | 2039-1/4 |
| 545 | 1201-1/2 | 672.5 | 1482-1/2 | 800 | 1763-1/2 | 927.5 | 2044-3/4 |
| 547.5 | 1207 | 675 | 1488 | 802.5 | 1769 | 930 | 2050-1/4 |
| 550 | 1212-1/2 | 677.5 | 1493-1/2 | 805 | 1774-1/2 | 932.5 | 2055-3/4 |
| 552.5 | 1218 | 680 | 1499 | 807.5 | 1780 | 935 | 2061-1/4 |
| 555 | 1223-1/2 | 682.5 | 1504-1/2 | 810 | 1785-1/2 | 937.5 | 2066-3/4 |
| 557.5 | 1229 | 685 | 1510 | 815 | 1791 | 940 | 2072-1/4 |
| 560 | 1234-1/2 | 687.5 | 1515-1/2 | 815 | 1796-1/2 | 942.5 | 2077-3/4 |
| 562.5 | 1240 | 690 | 1521 | 817.5 | 1802-1/4 | 945 | 2083-1/4 |
| 565 | 1245-1/2 | 692.5 | 1526-1/2 | 820 | 1807-3/4 | 947.5 | 2088-3/4 |
| 570 | 1256-1/2 | 695 | 1532 | 822.5 | 1813-1/4 | 950 | 2094-1/4 |
| 572.5 | 1262 | 697.5 | 1537-1/2 | 825 | 1818-3/4 | 952.5 | 2099-3/4 |
| 575 | 1267-1/2 | 700 | 1543 | 827.5 | 1824-1/4 | 955 | 2105-1/4 |
| 577.5 | 1273 | 702.5 | 1548-1/2 | 830 | 1829-3/4 | 957.5 | 2110-3/4 |
| 580 | 1278-1/2 | 705 | 1554 | 832.5 | 1835-1/4 | 960 | 2116-1/4 |
| 582.5 | 1284 | 710 | 1565-1/4 | 835 | 1840-3/4 | 962.5 | 2121-3/4 |
| 585 | 1289-1/2 | 712.5 | 1570-3/4 | 837.5 | 1846-1/4 | 965 | 2127-1/4 |
| 587.5 | 1295 | 715 | 1576-1/4 | 840 | 1851-3/4 | 967.5 | 2132-3/4 |
| 590 | 1300-1/2 | 717.5 | 1581-3/4 | 842.5 | 1857-1/4 | 970 | 2138-1/4 |
| 592.5 | 1306 | 720 | 1587-1/4 | 845 | 1862-3/4 | 972.5 | 2143-3/4 |
| 595 | 1311-1/2 | 722.5 | 1592-3/4 | 850 | 1873-3/4 | 975 | 2149-1/4 |
| 597.5 | 1317 | 725 | 1598-1/4 | 852.5 | 1879-1/4 | 977.5 | 2154-3/4 |
| 600 | 1322-3/4 | 727.5 | 1603-3/4 | 855 | 1884-3/4 | 980 | 2160-1/2 |
| 602.5 | 1328-1/4 | 730 | 1609-1/4 | 857.5 | 1890-1/4 | 982.5 | 2166 |
| 605 | 1333-3/4 | 732.5 | 1614-3/4 | 860 | 1895-3/4 | 985 | 2171-1/2 |
| 607.5 | 1339-1/4 | 735 | 1620-1/4 | 862.5 | 19.1-1/4 | 990 | 2182-1/2 |
| 610 | 1344-3/4 | 737.5 | 1625-3/4 | 865 | 1906-3/4 | 992.5 | 2188 |
| 612.5 | 1350-1/4 | 740 | 1631-1/4 | 867.5 | 1912-1/4 | 995 | 2193-1/2 |
| 615 | 1355-3/4 | 742.5 | 1636-3/4 | 870 | 1918 | 997.5 | 2199 |
| 617.5 | 1361-1/4 | 745 | 1642-1/4 | 872.5 | 1923-1/2 | 1000 | 2204-1/2 |
| 620 | 1366-3/4 | 747.5 | 1647-3/4 | 875 | 1929 |  |  |

