

***Special  
Olympics  
Hawai'i***



# ***Powerlifting***



***Sport Information Guide  
Rules and Guidelines  
Spring 2025***

# TABLE OF CONTENTS

## SOHI POWERLIFTING RULES AND REGULATIONS

	<b><u>Pg. #</u></b>
Section A – General Rules	3
Section B – Important Dates	3
Section C – SOHI Training Policy	3-4
Section D – Official Events and Codes	4
Section E – Registration Rules	4
Section F – Equipment	4-5
Section G – Uniforms	5-7
Section H – Officials	7
Section I – Coaches and Their Responsibilities	7
Section J – Divisioning, Competition Schedule, and Weigh-in	7-8
Section K – General Rules of Competition and Modifications	9
Section L – Event Specific Rules and Modifications	10-13
- Squat	10
- Bench Press	11-12
- Deadlift	12-13
- Combination 2	13
- Combination 3	13
Coaches Code of Conduct	14-15
Athletes/Unified Partners Code of Conduct	16-17
Attachments	
- Wilks Formula for Men	18-22
- Wilks Formula for Women	22-25
- Kilo to Pounds Conversion Table	26

### **Special Olympics Mission Statement:**

The mission of Special Olympics is to provide year-round sports training and athletic competition in a variety of Olympic-type sports for children and adults with intellectual disabilities, giving them continuing opportunities to develop physical fitness, demonstrate courage, experience joy and participate in a sharing of gifts, skills and friendship with their families, other Special Olympics Athletes and the community.

### **Rule Changes, Additions, or Clarifications to 2024 Rules**

**Section B** - 2024 Deadlines and Dates have been updated.

**For more information please go to [www.sohawaii.org](http://www.sohawaii.org) or contact Greg Terhune via e-mail [sohisports@sohawaii.org](mailto:sohisports@sohawaii.org) or cell phone at (808) 779-9461**

# SOHI POWERLIFTING RULES AND REGULATIONS

These Official Special Olympics Hawaii (SOHI) Rules shall govern all SOHI Powerlifting competitions. SOHI has created these rules based upon International Powerlifting Federation (IPF) and Special Olympics Inc. rules. IPF rules shall be employed except when they are in conflict with the Official SOHI Powerlifting Rules. In such cases, these Official SOHI Powerlifting Rules shall apply.

## SECTION A - GENERAL RULES

1. Each Special Olympics athlete is required to have a valid Medical Form (Application for Participation) filled out by a certified physician, and a signed Release Form in order to participate. These forms must be on file with their Area Director and with the State Office.
2. All Coaches and Assistant Coaches must fill out a Volunteer Information Form and meet Class "A" Volunteer criteria in order to participate.
3. All Head Coaches and Assistant Coaches must complete NFHS Concussion Training.
4. Each team must have a Head Coach certified by SOHI in Powerlifting in order to participate in Summer Games.
5. For more information regarding Coaches Certification and Class A Volunteer requirements please visit: <https://sohawaii.org/get-involved/coaches/>
6. Athletes must participate in a training program run by a registered delegation. Athletes must comply with Delegation, Area, and State training policies and standards and must meet minimum attendance requirements set by the State, Area, or Delegation to participate in Area, Regional, or State competition.
7. Each athlete is required to participate in the qualifying Area or Regional competition to participate in the State Summer Games. They must participate in an event to qualify for that same event at State Summer Games.
8. No Make-up competition will be allowed to qualify athletes who have missed Area or Regional competition.
9. All delegations must abide by the most current COVID Guidelines and Protocols.

## SECTION B – IMPORTANT DATES – POWERLIFTING

Event	Date/Deadline
Official Training May Begin	February 2025
Coaches Certification Clinic	March 1, 2025
Official Training Must Begin for Delegations/ Teams	March 1, 2025
All Athletes must begin training/ Last day to transfer delegations	April 1, 2025
Registration Deadlines for Area or Regional Competition	Given by Area/Regional Director
Area Competitions	Check with Area/Regional Director
Summer Games	June 6, 7,8 2025

## SECTION C – SPECIAL OLYMPICS HAWAII TRAINING POLICY

1. Delegations must offer enough training sessions so that athletes have the opportunity to gain the skills and fitness levels required to be successful in their specific events.

2. Athletes must attend enough training sessions gain the skills and fitness levels required to be successful in their specific events.
3. Powerlifting Training must be offered a minimum of two times per week.
4. Area and Regional Competitions, scrimmages, and mini-meets DO count as training sessions.
5. SOHI requires that Athletes/ Unified Partners attend a minimum of 75% of training sessions offered by their delegation. Delegations may require a higher attendance percentage, but may not require athletes/Unified Partners to attend more than 90% of training sessions.
6. Athletes with documented injury or illness during a season may receive an exemption from the above policy, but must participate in a minimum of **50%** of practices during the season and must have the requisite skills and be physically capable (strength, fitness, injury/sickness fully healed with doctor's clearance) of successfully participating in the sport as determined by their Head Coach.

## SECTION D - OFFICIAL EVENTS and CODES

Events	Codes
Bench Press	BENCH
Dead Lift	DEAD
Squat	SQUAT
Combination 2 (Bench Press and Dead Lift)	COMB 2
Combination 3 (Bench Press, Dead Lift, and Squat)	COMB 3

## SECTION E - REGISTRATION RULES

1. Athletes must be 14 years of age to train and compete.
2. Athletes may enter one, two, or all three of the individual events.
3. Athletes entered in the Bench Press and Deadlift **must** register for the Combination 2 Event.
4. Athletes entered in the Bench Press, Deadlift, and Squat **must** register for the Combination 3 Event.
5. Athletes must be proficient in each lift for which they are registered.

## SECTION F - EQUIPMENT

1. Bar and Disc Specifications
  - a. Distance between collars: 1m 31cm (4'3.5") at a maximum.
  - b. Total length outside the sleeves: 2m 20cm (7'2.75") at a maximum.
  - c. Diameter of the bar: 28mm (1 7/8") minimum; 29mm (1 13/16") maximum.
  - d. Diameter of the largest disc: 45cm (1'5.75").
  - e. Weight of the largest disc: 25kg (55 lbs.).
  - f. Weight of the bar: 20 kg (45 lbs.) with collars: 25kg (55lbs).
  - g. The discs must be in the following range (weight will vary if in pounds): 25kg (55lbs), 20kg (44lbs), 15kg (33lbs), 10kg (22lbs), 5kg (11lbs), 2.5kg (5.5lbs), 1.25kg (2.5lbs).
  - h. All discs must be clearly marked with their weight.
  - i. Collars shall always be used when discs are loaded on the bar.

- j. An athlete may have the option of using a 15kg bar for the bench press only. This bar may be used up to the point that the 20kg bar can be used by the athlete. **Once the athlete is lifting 45 pounds or more, the 20kg bar will be used.** The bar will have the following specifications:

Weight: 15kg

Length: 201 cm

Outer ends (sleeves: 5cm diameter/32cm long and must rotate)

Grip section: 2.5 cm diameter/ 131 cm long

2 knurled grip sections spaced 42 cm apart with non-knurled 0.5 cm strip 19.5 cm from inner sleeves

## 2. Bench Specifications

### a. Standard Flat Level Bench

Length: No fewer than 1.22m, Width: 29cm to 32cm, Height: 42cm to 45cm

Note: Athletes with physical disabilities may use a Disabled Flat Level Bench. (If an athlete requires a Disabled Flat Level Bench, they must notify the event director at least two weeks prior to the event.)

### b. Disabled Flat Level Bench

Length: 2.1m overall, Width: Head end = 30.5cm, Main Body = 61cm Height: 45cm to 50cm

## SECTION G - UNIFORMS

### 1. Costume and Personal Equipment

#### a. Lifting Suit

- 1) A non-supportive lifting suit shall be worn in competition. The suit straps must be worn over the lifter's shoulders at all times in all lifts in all competitions.
- 2) **Lifters can wear an approved long-legged singlet, but without knee sleeves or knee wraps.**  
**Whichever singlet a lifter wears for the squat, they must wear the same singlet throughout all disciplines.**
- 3) The suit must be constructed entirely of fabric or a synthetic textile material, such that no support is given to the lifter by the suit in the execution of any lift.
- 4) It may be of any color or colors.
- 5) The suits material shall be of a single thickness, other than a second thickness of material of up to 12 cm x 24 cm allowed in the area of the crotch.
- 6) There must be legs to the suit, extending a minimum of 3 cm and a maximum of 25 cm, from the top of the crotch down the inside of the leg, as measured when worn by the lifter in the standing position. Seams and hems must not exceed 3cm in width and .5cm in thickness. Only non-supportive suits may have seams and hems exceeding 3cm in width.

If the athlete does not have a lifting suit they can wear gym shorts and a T-shirt subject to the following requirements:

- 1) Shorts must have an elastic waist. No belts other than the lifting belt may be worn.
- 2) The shorts must not extend beyond the top of the kneecap.
- 3) T-shirts must meet the requirements in the following section (b. Undershirt). No tank tops may be worn during competition.
- 4) Long pants may not be worn.

b. Undershirt

An undershirt 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 shirt during the performance of the Deadlift. The 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 that might assist the lifter in competition.
- 4) The T-shirt must have sleeves, but which do not terminate below the elbow or up at the deltoid.

c. Under shorts

A standard commercial "athletic supporter" or standard commercial under shorts 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 Deadlift. Powerlifting or indoor sport shoes must be worn. No hiking or working boots allowed. The height of the heel shall not exceed 5cm.

e. Lifting Belt

Weight belts are required for athletes participating in the Deadlift and Squat. Belts are encouraged, but optional for the Bench Press. The belt can be made of leather, vinyl, nylon, or other similar non-stretch or non-metal (other than buckle and stub attachments) material. The belt must be worn on the outside of the suit. Dimensions: Width - a maximum of 10cm; Thickness - a maximum of 13mm. 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 8cm and a maximum length of 1m may be worn. A wrist wrap shall not extend beyond 10cm above or 2cm below the center of the wrist. In lieu of wrist wraps, wristbands not exceeding 10cm 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 30cm in total length and 8cm in width as well as a thumb loop. The total length of a wrist band shall not exceed 50cm. The thumb loop shall not be over the thumb during the competitive lift.
- 2) Knee sleeves that do not exceed 30 cm in length or 7 mm in thickness may be worn by the competitor. The Head Referee shall reject any knee sleeves that have been put on the lifter using plastic sliding, lubricants, or using assistance beyond what is normally required for dressing on a daily basis. If wraps are worn, they may not be in contact with the socks or lifting uniform.

g. Other substances

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.



## 2. Modifications

Athletes with physical disabilities (e.g. wheelchair, cerebral palsy, amputees) may wear a two-piece outfit, with both upper and lower pieces being form fitting.

## SECTION H - OFFICIALS

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 may 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 to the speaker who will make the appropriate announcement.
3. A Platform Manager may be appointed and shall be a certified official.

## SECTION I - COACHES AND THEIR RESPONSIBILITIES

1. Coaches are not allowed in designated lifting areas. Athletes are subject to disqualification if coaches do not adhere to the officials and the IPF and SOHI rules.
2. Coaches are responsible for knowing and understanding the rules of the sport, not only the modified rules in this manual, but also IPF rules. The Governing Body of Rules for Special Olympics Hawaii Powerlifting is **the International Powerlifting Federation (IPF)**. To acquire your own **IPF** Rules Book, go to their website:  
[www.powerlifting-ipf.com](http://www.powerlifting-ipf.com)
3. It is recommended that all Powerlifting Coaches are certified by Special Olympics. Any delegation entering Powerlifters for the Summer Games must have a Special Olympics certified Head Coach in Powerlifting.
4. The Head Coach must ensure that proper supervision is provided for all athletes while training and in competition.

## SECTION J – DIVISIONING, COMPETITION SCHEDULE, AND WEIGH-IN

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). Age and gender divisions may be combined if ability levels are close. Weight classes may be combined or modified. The Wilks formula will be utilized to account for differences in weight and gender. Divisions = all weight classes.
  - a. Men
    - 1) 53 kg (111 lbs.)
    - 2) 59 kg (130 lbs.)
    - 3) 66 kg (145.5 lbs.)
    - 4) 74 kg (163 lbs.)
    - 5) 83 kg (183 lbs.)
    - 6) 93 kg (205 lbs.)
    - 7) 105 kg (231 lbs.)

- 8) 120kg (264.5 lbs.)
- 9) 120+ kg (264.75 or more lbs.)

b. Women

- 1) 43 kg (95.75 lbs.)
- 2) 47 kg (103 lbs.)
- 3) 52 kg (114.5 lbs.)
- 4) 57 kg (125.5 lbs.)
- 5) 63 kg (139 lbs.)
- 6) 72 kg (158.5 lbs.)
- 7) 84 kg (185 lbs.)
- 8) 84+ kg (185.25 lbs.)

- c. Weight Classes are a divisioning tool which groups athletes according to body weight which is the primary determinant of ability.
- 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 performance and should not be significantly higher or lower (except in the case of injury) than the athlete’s previous performance within the last six to 12 months.

2. Weigh-In

- a. Weigh-in of the competitors will take place upon check-in at Area or Regional Competition. At State Games, weigh-in will take place the afternoon or evening before the first day of competition. The weigh-in will be conducted by the Chief Judge of the meet.
- b. Weigh-in will be in secret and the lifters will be allowed in one at a time. Only the referees for the body weight classes, the lifter and his/her coach or trainer will be allowed at the weigh-in. The weigh-in results will not be made known until after the total weigh-in is finished.
- c. An athlete’s weight category must be declared at the coaches’ technical meeting to be scheduled and announced prior to competition.
- d. At weigh-in, athletes may be required to show their understanding of a safe dead lift and squat by performing the lift with a light weight. Athletes not demonstrating a safe lift will not be allowed to participate in that event.
- e. At weigh-in, the coach must inform the Head Judge of the athlete’s opening lift for each event.
- f. At weigh-in, the coach must inform the Head Judge if an athlete has an anatomical (physical) disability, which would require any adaptation in the rules. At weigh-in the coach must inform the Head Judge if the lifter will need more than one minute to start his or her lifts due to a physical disability.
- g. At weigh-in, the athlete and coach must present all equipment which the athlete will use at competition. (e.g. weight-belt, wraps, lifting uniform).



## SECTION K – GENERAL RULES OF COMPETITION AND MODIFICATIONS

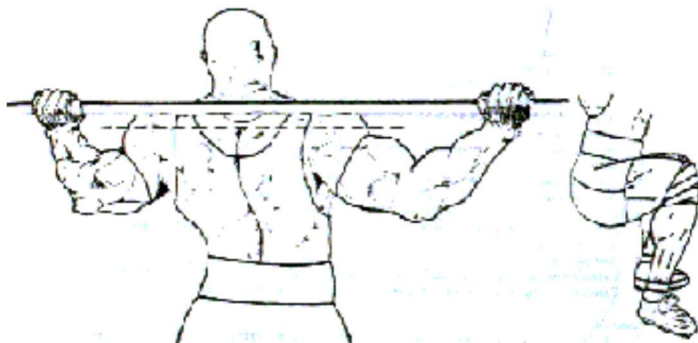
- 1) Rounds System - Lifters will be divided into flights of no more than 15 lifters. In each flight, the lifter with the lightest attempt will lift first, and the weight loaded onto the bar will progressively increase until all in the flight have lifted. The bar will then be unloaded and second attempts 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.
- 2) During any competition organized on a platform or stage, nobody other than the lifter, the members of the jury, the officiating referees, assigned medical personnel and assigned platform personnel, the managers, and/or the competing lifter's coach shall be allowed around the platform or on the stage.
- 3) An area on the platform behind the Chief Referee will be marked and may be occupied by the coach during the performance of his or her athlete's lift attempt. The coach may give manual signals.
- 4) 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 expeditor card at the time of the weigh-in) will be granted extra time, up to three minutes if needed.
- 5) First round attempts should be submitted at weigh-in.
- 6) A lifter should submit his/her second and third attempts within one minute of completing their preceding attempt. If no weight is submitted within a reasonable amount of time the lifter will be granted a 2.5 kg increase on the next attempt. Should the lifter have failed his previous attempt, and not submitted a weight for a further attempt within a reasonable amount of time, then the bar will be loaded to the failed weight.
- 7) Commands for the Hearing Impaired/Deaf Lifter in Bench Press: The head Judge shall reposition him/herself so as to be able to provide a visual movement of the arm, both to begin the lift and to rack the weight.
- 8) Coaches must stress in practice that the athletes must wait for the Head Judge to give the "Start", "Press", and "Rack" commands in the Bench press, "Down" in the Deadlift, and "Squat" and "Rack" in the Squat. Attempts will be declared "NO LIFT" if the athletes do not wait and respond to these commands.
- 8) 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.
- 9) At any time during a lift, if the Head Judge feels that the lifter is endangering themselves, they will ask the Spotters to step in and assist the lifter in either racking, or returning the bar to the floor.
- 10) Scoring of the events shall be the maximum weight lifted for each event and a total combined maximum weight for all events.
- 11) The minimum attempt for any event will be the official competition bar with no collars.
- 12) The Wilks Formula (WF)\* is presented as a table of coefficients. Each lifter has a coefficient determined by bodyweight (BW) and gender. To determine the placing of lifters multiply each lifters coefficient by his or her total. The resulting factor is his/her Wilks Formula Total (WFT). The lifter having the highest WFT is awarded first, the second highest second, etc.
- 13) \*See the official Wilks Formula Charts (attached).

## SECTION L - EVENT SPECIFIC RULES AND MODIFICATIONS

### SQUAT

- 1) The Squat is an advanced lift. Athletes must have extensive training and must be able to demonstrate proficiency in this lift before they are allowed to compete.
- 2) The lifter shall assume an upright position with the top of the bar not more than 3cm 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.
- 3) After removing the bar from the racks, the lifter must move backwards 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".
- 4) Upon receiving the Chief Referee's signal, the lifter must bend and lower the body until the top surface of the legs at the hip joint is lower than the top of the knees. See illustration below.

#### *Squat Depth Illustration:*



- 5) The lifter must recover at will without double bouncing or any downward movement after starting up to an upright position with the knees locked. When the lifter is motionless, the Chief Referee will give the signal to replace the bar.
- 6) 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.
- 7) The lifter shall face the front of the platform.
- 8) The lifter shall not hold the collars, sleeves, or discs at any time during the performance of the lift. However, at the edge of the hand gripping, the bar may be in contact with the inner surface of the collars.
- 9) Not more than five and fewer than two spotter/loaders shall be on the platform at any one time.
- 10) The lifter may enlist the help of the spotter/loaders in removing the bar and replacing it in the racks; however, once the bar has cleared the racks, spotter/loaders shall **not** assist the lifter further with regard to proper positioning, foot placement, bar positioning, etc.
- 11) 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.

- 12) An athlete with Down Syndrome who has been diagnosed with Atlanto-Axial Instability may not participate in the Squat event.
- 13) 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 the knees locked at the commencement and completion of the lift.
  - d) Any shifting of the feet laterally, backwards, or forwards, during the performance of the lift.
  - e) Failure to bend the knees and lower the body until the top surface of the legs at the hip joint 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 spotter/loaders between the chief referee's signals.
  - h) Contact of elbows or upper arms with 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 the completion of the lift.
  - k) Failure to comply with any of the requirements contained in the general description of the lift.

## **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. 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 10cm in width.
- 3) After removing the bar from the racks or receiving it from the spotter or coach, 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) If the lifter receives the bar from their coach, once the lifter has control of the bar the coach must step back to their designated position. The lifter may only have a lift-off from their coach if it is requested at the weigh-in. The athlete must receive the bar at arm's length.
  - b) The spacing of the hands shall not exceed 81cm (2'8"), 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 command "PRESS" at which time the bar shall be pressed upwards with an even extension of the arms to straight-arm's length. 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.
  - g) A maximum of four and a minimum of two spotter/loaders shall be mandatory.
- 5) 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 lifting position after the "Start" signal, i.e.: any raising movement of the head/shoulders, buttocks, or feet from their original points of contact with the bench or floor (or plates/blocks) or lateral movement of hands on the bar. Slight or very minor foot movement is allowed. Both sole and heel must stay in contact with the floor / blocks. 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) Contact with the bar of the lifter by the spotter/loaders between the Chief Referees signals.
  - g) Deliberate contact between the bar and the bar rest uprights during the lift to make the lift easier.
  - h) Failure to press the bar to full arms extension (full arms length) at the completion of the attempt.
  - i) Failure to comply with any of the requirements contained in the general description of the lift.

## **DEAD LIFT**

- 1) 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).
- 2) The lifter shall face the front of the platform.
- 3) 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 criteria is acceptable, the lift shall be accepted.
- 4) 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.
- 5) Any attempts to raise the bar or deliberate attempts to lift the bar shall count as an attempt.
- 6) Causes for disqualification in the dead lift:
  - a) Any downward movement of the bar or either end of the bar during the uplifting.
  - b) Failure to stand erect with the shoulders in the 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.

**Note:** The definition of control, as we are interpreting it, is:

The bar cannot be dropped, or accelerated to the floor. The athlete must have their hands on the bar as they bring it back to the floor. The athlete is not required to do a “negative” lift, but they are responsible for controlling direction and bounce of the bar, which must be in their grip. (i.e. As most of the athletes use a grip with one hand over, one hand under, they cannot change this grip as they bring the bar back to the floor).

The Head Judge may give one warning to the athlete if the return of the bar is questionable.

- g) Failure to comply with any of the requirements contained in the general description of the lift.

## **COMBINATION 2**

- 1) An athlete is required to compete in the Bench Press and Deadlift to qualify for a final score in the combination 2 event.
- 2) An athlete’s final score is calculated by adding together the maximum weight he or she successfully lifted in the Bench Press and Deadlift.
- 3) Three unsuccessful lifts in either of the Bench Press or Deadlift automatically eliminate the lifter from the Combination 2 event.

## **COMBINATION 3**

- 1) An athlete is required to compete in the Bench Press, Deadlift, and Squat to qualify for a final score in the combination 3 event.
- 2) An athlete’s final score is calculated by adding together the maximum weight he or she successfully lifted in the Bench Press, Deadlift, and Squat.
- 2) Three unsuccessful lifts in either the Bench Press, Deadlift, or Squat will automatically eliminate the lifter from the Combination 3 event.

## **Special Olympics Coaches Code of Conduct**

Special Olympics is committed to the highest ideals of sport and expects all coaches to honor sport and Special Olympics. This is the SOI and SOHI Coaches Code of Conduct. Local Delegations and Area Programs may also have Codes of Conduct specific to their program with certain specifications not included below. All Special Olympics coaches agree to observe the following code:

### **Respect for Others:**

I will respect the rights, dignity and worth of athletes, coaches, officials, other volunteers, friends and spectators in Special Olympics.

I will treat everyone equally regardless of sex, ethnic origin, religion or ability.

I will be a positive role model for the athletes I coach.

### **Ensure a Positive Experience:**

I will ensure that for each athlete I coach, the time spent with Special Olympics is a positive experience.

I will respect the talent, developmental stage and goals of each athlete.

I will ensure each athlete competes in events that challenge that athlete's potential and are appropriate to that athlete's ability.

I will be fair, considerate and honest with athletes and communicate with athletes using simple, clear language.

I will ensure that accurate scores are provided for entry of an athlete into any event.

I will instruct each athlete to perform to the best of the athlete's ability at all preliminary competition and finals competition in accordance with the Official Special Olympics Sports Rules.

### **Act Professionally and Take Responsibility for My Actions:**

My language, manner, punctuality, preparation and presentation will demonstrate high standards.

I will display control, respect, dignity and professionalism to all involved in the sport (athletes, coaches, opponents, officials, administrators, parents, spectators, media, etc.).

I will encourage athletes to demonstrate the same qualities.

I will not drink alcohol, smoke or take illegal drugs while representing Special Olympics at training sessions, during competition, or at any Special Olympics event or function.

I will refrain from any form of personal abuse towards athletes and others, including verbal, physical and emotional abuse.

I will be alert to any form of abuse from other sources directed toward athletes in my care.

### **Quality Service to the Athletes:**

I will seek continual improvement through performance evaluation and ongoing coach education.

I will be knowledgeable about the Sports Rules and skills of the sport(s) I coach.

I will provide a planned training program.

I will keep copies of the medical, training and competition records for each athlete I coach.

I will follow the Special Olympics Hawaii and National Federation/Governing Body rules for my sport(s).

### **Health and Safety of Athletes:**

- I will ensure that the equipment and facilities are safe to use.
- I will ensure that the equipment, rules, training and environment are appropriate for the age and ability of the athletes.
- I will review each athlete's medical form and be aware of any limitations on that athlete's participation noted on that form.
- I will encourage athletes to seek medical advice when required.
- I will maintain the same interest and support toward sick and injured athletes.
- I will allow further participation in training and competition only when appropriate.

### **Violations of the Code of Conduct:**

I understand that if I violate this Code of Conduct I will be subject to a range of consequences, up to and including being prohibited from coaching in Special Olympics.

Furthermore, I understand that I accept the responsibility for the behavior of the athletes under my supervision.

Should the behaviors and/or attitude of any coach or other faction of the member organization be contrary to the principles, goals, or philosophies of Special Olympics, then one or more of the following steps may be taken by the Games Committee, Sport Officials, or other representatives of Special Olympics Hawaii in an effort to alleviate the situation without further affecting Special Olympic athletes or the competition:

The coach may be notified of the undesirable behavior and requested to remedy the situation for continued participation, **and/or** the coach may be requested to withdraw personally, or as a team or organization, from the remainder of the event or tournament.

In the event of extreme or repeated behavior contrary to the best interests of Special Olympics, Special Olympics may:

Prevent the coach, team organization, or specific members of the delegation from participating in any or all Special Olympics events for a specified period of time, **and/or** prevent the coach, team, organization, or specific members of the delegation from participating in Special Olympics indefinitely.



**Athlete/ Unified Partner Code of Conduct**  
**Must be signed by athlete/partner and legal guardian each season**

Special Olympics Hawai'i is committed to the highest ideals of sport and expects all athletes to honor sports and Special Olympics. The following code of conduct applies to in-person events, virtual events and activities (Zoom, etc.) and on relevant social media platforms. All athletes and Unified Partners agree to the following code:

**Athlete/ Partner Standards of Behavior**

- I will practice good sportsmanship.
- I will learn and follow the rules of my sport.
- I will act in ways that bring respect to my coaches, team, Special Olympics, and me.
- I will attend 75% or more of practices.
- I will participate in all activities as deemed necessary by my Head Coach or Head of Delegation.
- I will always try my best during training, divisioning events, and competition.
- I will obey all safety rules
- I will listen to and respect my coaches and officials and ask questions when I do not understand
- I will not "hold back" in preliminary competitions just to get into an easier finals competition division
- I will abide by and follow all laws, Special Olympics Hawai'i rules, and National Federation/Governing Body rules for my sport(s).
- I will not use or bring alcohol, drugs/controlled substances, or tobacco products at/to any Special Olympics event (practices, competitions, fundraisers, etc.)
- I will not verbally insult or abuse others or use inappropriate language (swearing). This applies to in-person, virtual and social media settings.
- I will not possess harmful or threatening weapons.
- I will not act in a violent, sexually inappropriate or disruptive manner with other athletes, coaches, volunteers, or staff. This includes inappropriate or unwanted physical, verbal, or sexual actions or behaviors, both in-person and on-line.

**Disciplinary Measures for violations of the Code of Conduct**

Minor Offenses: non-illegal or non-aggressive behaviors

- 1) 1<sup>st</sup> offense – verbal warning
- 2) 2<sup>nd</sup> offense – written warning with the possibility of short-term suspension, depending on severity of violation. Consequences may include:
  - a) Removal from practice(s)
  - b) Removal or suspension from Area/Regional competition
  - c) Removal or suspension from State Games, a season, or a longer period of time.
- 3) 3<sup>rd</sup> offense – Suspension from program for a period to be determined based on severity and timing of the current and past violations. Suspensions may range from one season to three years. If prior violations are minor, and/or not recent history, suspensions will be reviewed.

Major Offenses: Illegal acts and aggressive behaviors including sexual harassment, physical assault and threats of physical violence

- 1) Immediate suspension from the program, AND
- 2) Suspension or Removal from the SOHI program, suspension length determined by the SOHI Risk Management Group.

All disciplinary action may be appealed to the SOHI Appeals Committee by the athlete/ partner and/ or their legal guardian.

Note: All offenses will be documented and kept on file.

**Travel to competitions or events:** Athletes and Youth (8-17) Partners

In order for any Special Olympics Hawai'i athlete/youth partner to travel to a Regional or State competition they must meet the following travel requirements.

- Be able to travel with a Special Olympics designated chaperone for the duration of the event, including flights.
- Be able to independently manage the activities and skills of daily living, ie. toileting, showering, personal hygiene, etc., with minimal help.
- Cannot be a danger to themselves or others
- Cannot be a flight risk and must listen to instructions from their chaperone, coaches and Head of Delegation.
- Be able to compete in their events independently, or only with the level of assistance allowed in the rules for their specific events.

**Athlete/ Partner:**

I understand that I am to abide by this Code of Conduct, I will be subject to a range of consequences by Special Olympics Hawai'i up to and including not being allowed to participate.

Athlete/ Partner Signature: \_\_\_\_\_ Date: \_\_\_\_\_ Season: \_\_\_\_\_  
*To be signed by athlete/partner to indicate this code of conduct has been explained to them*

Athlete/ Partner Signature: \_\_\_\_\_ Date: \_\_\_\_\_ Season: \_\_\_\_\_  
*To be signed by athlete/partner to indicate this code of conduct has been explained to them*

Athlete/ Partner Signature: \_\_\_\_\_ Date: \_\_\_\_\_ Season: \_\_\_\_\_  
*To be signed by athlete/partner to indicate this code of conduct has been explained to them*

**Parent/guardian:** *(Required for participants 17 and under or for any athlete who is not their own legal guardian)*

I understand that I am to do everything in my power to ensure that this athlete/partner understands and upholds this code of conduct.

Parent/Guardian Signature: \_\_\_\_\_ Date: \_\_\_\_\_ Season: \_\_\_\_\_

Parent/Guardian Signature: \_\_\_\_\_ Date: \_\_\_\_\_ Season: \_\_\_\_\_

Parent/Guardian Signature: \_\_\_\_\_ Date: \_\_\_\_\_ Season: \_\_\_\_\_

# WILKS FORMULA for MEN and Women

by Robert Wilks, Australia

A formula used to determine the best lifter or lift of powerlifters of different body weights.

Find the lifters bodyweight coefficient number from the list by looking down the left hand column and the quarters of a pound across the top. EG 93.25 pounds has a coefficient of 1.2433.

Multiply this number by the individual lift or total. The lifter with the highest resulting figure is the "best lifter" or had the "best lift".

**Note:** Sean Anderson has converted the Wilks Coefficients for use with pounds (below), as used in the USA.

## Men's Lbs. to Wilks Coefficients (interpolations)

BWT in Pounds (lbs)	Interpolated Wilks Coefficients			
(1/4 lbs.) →	even	1/4	1/2	3/4
88.00	*****	1.3341	1.3294	1.3242
89.00	1.3195	1.3148	1.3098	1.3053
90.00	1.3008	1.2959	1.2914	1.2870
91.00	1.2822	1.2779	1.2736	1.2689
92.00	1.2647	1.2605	1.2560	1.2518
93.00	1.2477	1.2433	1.2393	1.2349
94.00	1.2310	1.2271	1.2229	1.2190
95.00	1.2152	1.2110	1.2072	1.2035
96.00	1.1995	1.1958	1.1921	1.1881
97.00	1.1846	1.1810	1.1771	1.1736
98.00	1.1702	1.1664	1.1629	1.1595
99.00	1.1559	1.1525	1.1492	1.1456
100.00	1.1423	1.1391	1.1355	1.1323
101.00	1.1291	1.1257	1.1226	1.1195
102.00	1.1161	1.1131	1.1100	1.1067
103.00	1.1037	1.1007	1.0975	1.0946
104.00	1.0917	1.0885	1.0856	1.0828

Wilks formula for Men cont.

BWT in Pounds (lbs)	Interpolated Wilks Coefficients			
(1/4 lbs.) →	even	1/4	1/2	3/4
105.00	1.0797	1.0769	1.0741	1.0711
106.00	1.0683	1.0653	1.0627	1.0599
107.00	1.0570	1.0544	1.0518	1.0489
108.00	1.0462	1.0437	1.0408	1.0383
109.00	1.0358	1.0330	1.0306	1.0281
110.00	1.0254	1.0230	1.0206	1.0179
111.00	1.0155	1.0131	1.0105	1.0081
112.00	1.0058	1.0033	1.0010	0.9987
113.00	0.9962	0.9939	0.9917	0.9893
114.00	0.9871	0.9849	0.9825	0.9803
115.00	0.9781	0.9758	0.9737	0.9715
116.00	0.9692	0.9671	0.9650	0.9628
117.00	0.9608	0.9587	0.9565	0.9545
118.00	0.9524	0.9503	0.9483	0.9462
119.00	0.9443	0.9423	0.9402	0.9383
120.00	0.9364	0.9343	0.9324	0.9305
121.00	0.9285	0.9267	0.9248	0.9226
122.00	0.9210	0.9192	0.9173	0.9155
123.00	0.9137	0.9117	0.9100	0.9083
124.00	0.9064	0.9047	0.9030	0.9012
125.00	0.8994	0.8978	0.8960	0.8943
126.00	0.8927	0.8909	0.8892	0.8876
127.00	0.8858	0.8842	0.8826	0.8809
128.00	0.8793	0.8777	0.8760	0.8745
129.00	0.8730	0.8713	0.8697	0.8682
130.00	0.8666	0.8651	0.8636	0.8620
131.00	0.8605	0.8589	0.8575	0.8560
132.00	0.8545	0.8530	0.8516	0.8500
133.00	0.8486	0.8472	0.8457	0.8443
134.00	0.8429	0.8415	0.8401	0.8388
135.00	0.8373	0.8359	0.8346	0.8331
136.00	0.8318	0.8305	0.8291	0.8278
137.00	0.8265	0.8251	0.8238	0.8225
138.00	0.8212	0.8199	0.8187	0.8173
139.00	0.8161	0.8148	0.8135	0.8123
140.00	0.8111	0.8098	0.8086	0.8074
141.00	0.8061	0.8049	0.8037	0.8025

Wilks formula for Men cont.

BWT in Pounds (lbs)	Interpolated Wilks Coefficients			
(1/4 lbs.) →	even	1/4	1/2	3/4
142.00	0.8013	0.8002	0.7989	0.7978
143.00	0.7966	0.7954	0.7943	0.7931
144.00	0.7920	0.7908	0.7896	0.7885
145.00	0.7875	0.7863	0.7852	0.7841
146.00	0.7829	0.7819	0.7809	0.7797
147.00	0.7787	0.7776	0.7765	0.7754
148.00	0.7744	0.7734	0.7723	0.7713
149.00	0.7702	0.7692	0.7682	0.7671
150.00	0.7661	0.7652	0.7641	0.7632
151.00	0.7622	0.7611	0.7601	0.7592
152.00	0.7582	0.7573	0.7563	0.7553
153.00	0.7544	0.7534	0.7525	0.7515
154.00	0.7506	0.7496	0.7488	0.7479
155.00	0.7468	0.7459	0.7451	0.7441
156.00	0.7433	0.7424	0.7415	0.7406
157.00	0.7396	0.7388	0.7380	0.7370
158.00	0.7362	0.7354	0.7345	0.7336
159.00	0.7328	0.7319	0.7311	0.7303
160.00	0.7294	0.7286	0.7278	0.7270
161.00	0.7262	0.7253	0.7245	0.7237
162.00	0.7229	0.7221	0.7213	0.7206
163.00	0.7197	0.7190	0.7182	0.7174
164.00	0.7167	0.7159	0.7151	0.7144
165.00	0.7136	0.7128	0.7121	0.7113
166.00	0.7106	0.7098	0.7092	0.7084
167.00	0.7077	0.7070	0.7062	0.7056
168.00	0.7048	0.7041	0.7034	0.7026
169.00	0.7019	0.7013	0.7006	0.6999
170.00	0.6992	0.6985	0.6979	0.6972
171.00	0.6965	0.6958	0.6952	0.6944
172.00	0.6938	0.6931	0.6925	0.6918
173.00	0.6912	0.6906	0.6899	0.6893
174.00	0.6886	0.6880	0.6874	0.6867
175.00	0.6861	0.6855	0.6848	0.6842
176.00	0.6836	0.6830	0.6824	0.6818
177.00	0.6812	0.6806	0.6800	0.6794
178.00	0.6788	0.6782	0.6776	0.6770
179.00	0.6765	0.6759	0.6753	0.6748

Wilks formula for Men cont.

BWT in Pounds (lbs)	Interpolated Wilks Coefficients			
(1/4 lbs.) →	even	1/4	1/2	3/4
180.00	0.6742	0.6736	0.6731	0.6725
181.00	0.6719	0.6713	0.6708	0.6702
182.00	0.6696	0.6691	0.6686	0.6680
183.00	0.6675	0.6669	0.6663	0.6659
184.00	0.6653	0.6648	0.6643	0.6637
185.00	0.6632	0.6627	0.6622	0.6617
186.00	0.6612	0.6607	0.6601	0.6597
187.00	0.6591	0.6586	0.6581	0.6577
188.00	0.6571	0.6566	0.6562	0.6556
189.00	0.6552	0.6547	0.6542	0.6537
190.00	0.6533	0.6528	0.6523	0.6518
191.00	0.6513	0.6509	0.6505	0.6500
192.00	0.6495	0.6491	0.6486	0.6482
193.00	0.6477	0.6473	0.6468	0.6463
194.00	0.6459	0.6455	0.6450	0.6446
195.00	0.6442	0.6437	0.6433	0.6428
196.00	0.6424	0.6420	0.6416	0.6412
197.00	0.6408	0.6403	0.6398	0.6395
198.00	0.6391	0.6387	0.6382	0.6379
199.00	0.6374	0.6371	0.6366	0.6363
200.00	0.6358	0.6355	0.6351	0.6347
201.00	0.6343	0.6338	0.6335	0.6331
202.00	0.6327	0.6323	0.6320	0.6316
203.00	0.6312	0.6308	0.6305	0.6300
204.00	0.6297	0.6294	0.6290	0.6286
205.00	0.6282	0.6279	0.6276	0.6271
206.00	0.6268	0.6264	0.6261	0.6258
207.00	0.6254	0.6250	0.6246	0.6243
208.00	0.6240	0.6236	0.6233	0.6229
209.00	0.6226	0.6222	0.6219	0.6216
210.00	0.6212	0.6210	0.6207	0.6203
211.00	0.6200	0.6196	0.6193	0.6190
212.00	0.6187	0.6184	0.6180	0.6177
213.00	0.6174	0.6171	0.6168	0.6164
214.00	0.6162	0.6159	0.6155	0.6152
215.00	0.6149	0.6146	0.6143	0.6140
216.00	0.6137	0.6134	0.6131	0.6128
217.00	0.6125	0.6122	0.6119	0.6117

Wilks formula for Men cont.

BWT in Pounds (lbs)	Interpolated Wilks Coefficients			
(1/4 lbs.) ➔	even	1/4	1/2	3/4
218.00	0.6114	0.6111	0.6108	0.6105
219.00	0.6102	0.6100	0.6097	0.6094
220.00	0.6091	0.6088	0.6085	0.6082
221.00	0.6080	0.6077	0.6075	0.6071
222.00	0.6069	0.6067	0.6063	0.6061
223.00	0.6059	0.6056	0.6053	0.6050
224.00	0.6048	0.6046	0.6043	0.6040
225.00	0.6038	0.6036	0.6032	0.6030
226.00	0.6028	0.6025	0.6023	0.6020
227.00	0.6018	0.6015	0.6013	0.6011
228.00	0.6008	0.6005	0.6003	0.6001
229.00	0.5999	0.5996	0.5994	0.5992
230.00	0.5989	0.5987	0.5985	0.5983
231.00	0.5980	0.5978	0.5976	0.5974
232.00	0.5971	0.5969	0.5967	0.5964
233.00	0.5962	0.5960	0.5958	0.5955
234.00	0.5953	0.5951	0.5949	0.5946
235.00	0.5945	0.5943	0.5941	0.5938
236.00	0.5936	0.5934	0.5932	0.5930
237.00	0.5928	0.5926	0.5924	0.5922
238.00	0.5920	0.5918	0.5916	0.5914
239.00	0.5912	0.5910	0.5908	0.5906
240.00	0.5904	0.5902	0.5900	0.5898
241.00	0.5897	0.5894	0.5893	0.5891
242.00	0.5889	0.5887	0.5885	0.5883
243.00	0.5881	0.5879	0.5878	0.5876
244.00	0.5874	0.5872	0.5870	0.5869
245.00	0.5867	0.5865	0.5863	0.5862
246.00	0.5860	0.5858	0.5856	0.5854
247.00	0.5853	0.5851	0.5849	0.5847
248.00	0.5846	0.5844	0.5843	0.5841
249.00	0.5840	0.5838	0.5836	0.5834
250.00	0.5833	0.5831	0.5829	0.5828
251.00	0.5827	0.5825	0.5823	0.5821
252.00	0.5820	0.5819	0.5817	0.5816
253.00	0.5814	0.5812	0.5811	0.5809
254.00	0.5808	0.5806	0.5805	0.5804
255.00	0.5802	0.5800	0.5799	0.5797

Wilks formula for Men cont.

BWT in Pounds (lbs)	Interpolated Wilks Coefficients			
(1/4 lbs.) →	even	1/4	1/2	3/4
256.00	0.5796	0.5794	0.5793	0.5791
257.00	0.5790	0.5788	0.5787	0.5786
258.00	0.5784	0.5783	0.5781	0.5780
259.00	0.5778	0.5777	0.5776	0.5775
260.00	0.5773	0.5772	0.5770	0.5769
261.00	0.5768	0.5766	0.5765	0.5764
262.00	0.5763	0.5761	0.5760	0.5758
263.00	0.5757	0.5756	0.5755	0.5754
264.00	0.5752	0.5750	0.5749	0.5748
265.00	0.5747	0.5746	0.5745	0.5744
266.00	0.5742	0.5741	0.5739	0.5738
267.00	0.5737	0.5736	0.5735	0.5734
268.00	0.5732	0.5731	0.5730	0.5729
269.00	0.5728	0.5727	0.5726	0.5724
270.00	0.5723	0.5722	0.5721	0.5720
271.00	0.5719	0.5718	0.5717	0.5715
272.00	0.5714	0.5713	0.5712	0.5711
273.00	0.5710	0.5709	0.5707	0.5706
274.00	0.5705	0.5704	0.5703	0.5702
275.00	0.5701	0.5700	0.5698	0.5698
276.00	0.5697	0.5696	0.5695	0.5694
277.00	0.5693	0.5691	0.5690	0.5689
278.00	0.5688	0.5688	0.5687	0.5686
279.00	0.5685	0.5683	0.5682	0.5681
280.00	0.5681	0.5680	0.5679	0.5678
281.00	0.5676	0.5675	0.5675	0.5674
282.00	0.5673	0.5672	0.5671	0.5670
283.00	0.5669	0.5668	0.5667	0.5666
284.00	0.5665	0.5665	0.5664	0.5662
285.00	0.5661	0.5661	0.5660	0.5659
286.00	0.5658	0.5658	0.5656	0.5655
287.00	0.5654	0.5654	0.5653	0.5652
288.00	0.5651	0.5651	0.5649	0.5648
289.00	0.5647	0.5647	0.5646	0.5645
290.00	0.5644	0.5643	0.5642	0.5642
291.00	0.5641	0.5640	0.5639	0.5639
292.00	0.5638	0.5636	0.5636	0.5635
293.00	0.5634	0.5634	0.5633	0.5632

Wilks formula for Men cont.

BWT in Pounds (lbs)	Interpolated Wilks Coefficients			
(1/4 lbs.) →	even	1/4	1/2	3/4
294.00	0.5631	0.5630	0.5629	0.5629
295.00	0.5628	0.5627	0.5627	0.5626
296.00	0.5624	0.5624	0.5623	0.5622
297.00	0.5622	0.5621	0.5620	0.5619
298.00	0.5618	0.5618	0.5617	0.5616
299.00	0.5616	0.5615	0.5614	0.5613
300.00	0.5612	0.5612	0.5611	0.5610
301.00	0.5610	0.5609	0.5608	0.5607
302.00	0.5607	0.5606	0.5605	0.5605
303.00	0.5604	0.5603	0.5602	0.5602
304.00	0.5601	0.5600	0.5600	0.5599
305.00	0.5598	0.5597	0.5597	0.5596
306.00	0.5595	0.5595	0.5594	0.5593
307.00	0.5592	0.5592	0.5591	0.5590
308.00	0.5590	0.5589	0.5589	0.5588
309.00	0.5587	0.5586	0.5586	0.5585
310.00	0.5584	0.5584	0.5583	0.5582
311.00	0.5582	0.5581	0.5580	0.5580
312.00	0.5579	0.5579	0.5578	0.5577
313.00	0.5576	0.5576	0.5575	0.5575
314.00	0.5574	0.5573	0.5572	0.5572
315.00	0.5571	0.5571	0.5570	0.5570
316.00	0.5569	0.5568	0.5567	0.5567
317.00	0.5566	0.5566	0.5565	0.5564
318.00	0.5564	0.5563	0.5562	0.5562
319.00	0.5561	0.5561	0.5560	0.5560
320.00	0.5559	0.5558	0.5557	0.5557
321.00	0.5556	0.5556	0.5555	0.5555
322.00	0.5554	0.5553	0.5552	0.5552
323.00	0.5551	0.5551	0.5550	0.5550
324.00	0.5549	0.5548	0.5548	0.5547
325.00	0.5547	0.5546	0.5546	0.5544
326.00	0.5544	0.5543	0.5543	0.5542
327.00	0.5542	0.5541	0.5541	0.5540
328.00	0.5539	0.5539	0.5538	0.5538
329.00	0.5537	0.5537	0.5536	0.5535
330.00	0.5535	0.5534	0.5533	0.5533
331.00	0.5532	0.5531	0.5531	0.5530

Wilks formula for Men cont.

BWT in Pounds (lbs)	Interpolated Wilks Coefficients			
(1/4 lbs.) →	even	1/4	1/2	3/4
332.00	0.5530	0.5529	0.5529	0.5528
333.00	0.5528	0.5527	0.5526	0.5526
334.00	0.5525	0.5525	0.5524	0.5524
335.00	0.5523	0.5522	0.5522	0.5521
336.00	0.5521	0.5520	0.5520	0.5519
337.00	0.5518	0.5518	0.5517	0.5516
338.00	0.5516	0.5515	0.5515	0.5514
339.00	0.5513	0.5513	0.5512	0.5512
340.00	0.5511	0.5511	0.5510	0.5509
341.00	0.5509	0.5508	0.5508	0.5507
342.00	0.5507	0.5506	0.5505	0.5505
343.00	0.5504	0.5504	0.5503	0.5503
344.00	0.5502	0.5502	0.5501	0.5500
345.00	0.5500	0.5499	0.5499	0.5498
346.00	0.5498	0.5497	0.5496	0.5496
347.00	0.5495	0.5495	0.5494	0.5494
348.00	0.5493	0.5492	0.5492	0.5491
349.00	0.5491	0.5490	0.5490	0.5489
350.00	0.5488	0.5488	0.5487	0.5487
351.00	0.5486	0.5486	0.5485	0.5485
352.00	0.5484	0.5483	0.5483	0.5482
353.00	0.5482	0.5481	0.5481	0.5480
354.00	0.5479	0.5479	0.5478	0.5478
355.00	0.5477	0.5477	0.5476	0.5475
356.00	0.5475	0.5474	0.5474	0.5473
357.00	0.5472	0.5472	0.5471	0.5470
358.00	0.5470	0.5469	0.5469	0.5468
359.00	0.5468	0.5467	0.5466	0.5466
360.00	0.5465	0.5465	0.5464	0.5464
361.00	0.5463	0.5462	0.5462	0.5461
362.00	0.5461	0.5460	0.5460	0.5459
363.00	0.5458	0.5458	0.5457	0.5457
364.00	0.5456	0.5456	0.5455	0.5455
365.00	0.5454	0.5453	0.5453	0.5452
366.00	0.5452	0.5451	0.5451	0.5450
367.00	0.5449	0.5449	0.5448	0.5448
368.00	0.5447	0.5447	0.5446	0.5445
369.00	0.5445	0.5444	0.5444	0.5443
370.00	0.5443	0.5442	0.5441	0.5441

Wilks formula for Men cont.

BWT in Pounds (lbs)	Interpolated Wilks Coefficients			
(1/4 lbs.) →	even	1/4	1/2	3/4
371.00	0.5440	0.5440	0.5439	0.5439
372.00	0.5438	0.5438	0.5436	0.5436
373.00	0.5435	0.5435	0.5434	0.5434
374.00	0.5433	0.5432	0.5432	0.5431
375.00	0.5431	0.5430	0.5430	0.5429
376.00	0.5429	0.5428	0.5427	0.5427
377.00	0.5426	0.5426	0.5425	0.5425
378.00	0.5424	0.5423	0.5423	0.5422
380.00	0.5419	0.5419	0.5418	0.5418
381.00	0.5417	0.5417	0.5416	0.5415
382.00	0.5415	0.5414	0.5414	0.5413
383.00	0.5413	0.5412	0.5411	0.5411
384.00	0.5410	0.5410	0.5409	0.5409
385.00	0.5408	0.5408	0.5407	0.5406
386.00	0.5406	0.5405	0.5405	0.5404
387.00	0.5404	0.5403	0.5402	0.5402
388.00	0.5401	0.5401	0.5400	0.5400
389.00	0.5399	0.5398	0.5398	0.5397
390.00	0.5397	0.5396	0.5396	0.5395
391.00	0.5394	0.5394	0.5393	0.5393
392.00	0.5392	0.5392	0.5391	0.5391
393.00	0.5390	0.5389	0.5389	0.5388
394.00	0.5388	0.5387	0.5387	0.5386
395.00	0.5386	0.5385	0.5385	0.5384
396.00	0.5384	0.5383	0.5383	0.5382
397.00	0.5381	0.5381	0.5380	0.5380
398.00	0.5379	0.5379	0.5378	0.5377
399.00	0.5377	0.5377	0.5376	0.5376
400.00	0.5375	0.5375	0.5373	0.5373

## Women's Lbs. to Wilks Coefficients (interpolations)

BWT in Pounds (lbs)	Interpolated Wilks Coefficients			
(1/4 lbs.) →	even	1/4	1/2	3/4
88.00	*****	1.4930	1.4907	1.4881
89.00	1.4857	1.4834	1.4809	1.4786
90.00	1.4762	1.4737	1.4713	1.4689
91.00	1.4664	1.4640	1.4617	1.4591
92.00	1.4567	1.4544	1.4518	1.4495
93.00	1.4471	1.4445	1.4422	1.4396
94.00	1.4372	1.4349	1.4323	1.4299
95.00	1.4275	1.4250	1.4227	1.4203
96.00	1.4177	1.4153	1.4130	1.4104
97.00	1.4081	1.4057	1.4032	1.4008
98.00	1.3985	1.3959	1.3936	1.3912
99.00	1.3887	1.3864	1.3840	1.3815
100.00	1.3791	1.3768	1.3743	1.3720
101.00	1.3697	1.3672	1.3649	1.3626
102.00	1.3600	1.3577	1.3555	1.3530
103.00	1.3507	1.3484	1.3460	1.3436
104.00	1.3414	1.3389	1.3367	1.3344
105.00	1.3320	1.3297	1.3275	1.3250
106.00	1.3228	1.3204	1.3181	1.3159
107.00	1.3135	1.3113	1.3091	1.3067
108.00	1.3045	1.3023	1.3000	1.2978
109.00	1.2944	1.2933	1.2911	1.2889
110.00	1.2866	1.2844	1.2823	1.2800
111.00	1.2779	1.2758	1.2734	1.2713
112.00	1.2692	1.2669	1.2648	1.2627
113.00	1.2605	1.2584	1.2564	1.2541
114.00	1.2520	1.2500	1.2477	1.2457
115.00	1.2437	1.2415	1.2395	1.2374
116.00	1.2352	1.2333	1.2313	1.2291
117.00	1.2271	1.2252	1.2230	1.2210
118.00	1.2190	1.2169	1.2150	1.2128
119.00	1.2109	1.2090	1.2069	1.2050
120.00	1.2031	1.2011	1.1992	1.1972
121.00	1.1952	1.1933	1.1914	1.1895
122.00	1.1876	1.1858	1.1837	1.1819
123.00	1.1801	1.1781	1.1763	1.1745
124.00	1.1725	1.1707	1.1689	1.1670



Wilks formula for Women cont.

BWT in Pounds (lbs)	Interpolated Wilks Coefficients			
(1/4 lbs.) ➡	even	1/4	1/2	3/4
125.00	1.1652	1.1634	1.1615	1.1598
126.00	1.1580	1.1561	1.1544	1.1527
127.00	1.1508	1.1491	1.1474	1.1455
128.00	1.1438	1.1421	1.1403	1.1386
129.00	1.1369	1.1351	1.1334	1.1318
130.00	1.1300	1.1284	1.1268	1.1250
131.00	1.1233	1.1215	1.1200	1.1184
132.00	1.1166	1.1150	1.1134	1.1117
133.00	1.1102	1.1086	1.1069	1.1053
134.00	1.1038	1.1021	1.1006	1.0991
135.00	1.0974	1.0959	1.0944	1.0928
136.00	1.0912	1.0898	1.0881	1.0867
137.00	1.0852	1.0836	1.0822	1.0808
138.00	1.0792	1.0778	1.0763	1.0748
139.00	1.0734	1.0719	1.0704	1.0689
140.00	1.0676	1.0660	1.0646	1.0633
141.00	1.0618	1.0605	1.0591	1.0576
142.00	1.0563	1.0549	1.0534	1.0521
143.00	1.0508	1.0493	1.0480	1.0466
144.00	1.0453	1.0440	1.0426	1.0413
145.00	1.0400	1.0386	1.0374	1.0361
146.00	1.0347	1.0335	1.0323	1.0309
147.00	1.0296	1.0284	1.0271	1.0259
148.00	1.0247	1.0234	1.0221	1.0209
149.00	1.0196	1.0185	1.0173	1.0160
150.00	1.0149	1.0137	1.0124	1.0112
151.00	1.0101	1.0089	1.0077	1.0066
152.00	1.0054	1.0042	1.0031	1.0019
153.00	1.0008	0.9997	0.9985	0.9974
154.00	0.9963	0.9951	0.9941	0.9930
155.00	0.9918	0.9908	0.9897	0.9886
156.00	0.9875	0.9864	0.9853	0.9843
157.00	0.9832	0.9821	0.9811	0.9801
158.00	0.9791	0.9781	0.9769	0.9759
159.00	0.9749	0.9739	0.9730	0.9720
160.00	0.9709	0.9699	0.9689	0.9679
161.00	0.9669	0.9660	0.9650	0.9640

Wilks formula for Women cont.

BWT in Pounds (lbs)	Interpolated Wilks Coefficients			
(1/4 lbs.) →	even	1/4	1/2	3/4
162.00	0.9631	0.9621	0.9612	0.9602
163.00	0.9592	0.9583	0.9574	0.9565
164.00	0.9556	0.9547	0.9536	0.9528
165.00	0.9519	0.9509	0.9500	0.9492
166.00	0.9483	0.9474	0.9465	0.9456
167.00	0.9448	0.9439	0.9430	0.9422
168.00	0.9414	0.9405	0.9388	0.9391
169.00	0.9379	0.9371	0.9363	0.9354
170.00	0.9346	0.9338	0.9330	0.9322
171.00	0.9313	0.9305	0.9298	0.9289
172.00	0.9282	0.9274	0.9266	0.9259
173.00	0.9251	0.9243	0.9235	0.9228
174.00	0.9220	0.9213	0.9206	0.9197
175.00	0.9190	0.9183	0.9175	0.9168
176.00	0.9161	0.9153	0.9146	0.9139
177.00	0.9132	0.9125	0.9118	0.9110
178.00	0.9104	0.9097	0.9090	0.9083
179.00	0.9077	0.9069	0.9063	0.9056
180.00	0.9049	0.9042	0.9036	0.9029
181.00	0.9023	0.9016	0.9009	0.9003
182.00	0.8996	0.8990	0.8984	0.8977
183.00	0.8971	0.8965	0.8959	0.8953
184.00	0.8946	0.8940	0.8934	0.8928
185.00	0.8922	0.8916	0.8910	0.8904
186.00	0.8898	0.8892	0.8886	0.8881
187.00	0.8875	0.8869	0.8864	0.8858
188.00	0.8852	0.8847	0.8841	0.8835
189.00	0.8830	0.8824	0.8818	0.8813
190.00	0.8808	0.8802	0.8797	0.8791
191.00	0.8786	0.8781	0.8776	0.8770
192.00	0.8765	0.8760	0.8754	0.8750
193.00	0.8744	0.8739	0.8734	0.8729
194.00	0.8724	0.8720	0.8715	0.8709
195.00	0.8705	0.8700	0.8695	0.8690
196.00	0.8686	0.8680	0.8676	0.8671
197.00	0.8667	0.8662	0.8657	0.8653
198.00	0.8649	0.8644	0.8639	0.8635
199.00	0.8630	0.8626	0.8621	0.8617

## Wilks formula for Women cont.

BWT in Pounds (lbs)	Interpolated Wilks Coefficients			
(1/4 lbs.) ➡	even	1/4	1/2	3/4
200.00	0.8612	0.8608	0.8604	0.8600
201.00	0.8595	0.8590	0.8587	0.8583
202.00	0.8578	0.8574	0.8570	0.8566
203.00	0.8562	0.8558	0.8554	0.8549
204.00	0.8546	0.8542	0.8538	0.8534
205.00	0.8530	0.8526	0.8523	0.8518
206.00	0.8515	0.8511	0.8507	0.8504
207.00	0.8499	0.8496	0.8492	0.8488
208.00	0.8485	0.8481	0.8478	0.8473
209.00	0.8470	0.8466	0.8463	0.8460
210.00	0.8456	0.8453	0.8450	0.8446
211.00	0.8443	0.8439	0.8436	0.8433
212.00	0.8429	0.8426	0.8422	0.8419
213.00	0.8415	0.8412	0.8409	0.8406
214.00	0.8403	0.8400	0.8396	0.8393
215.00	0.8390	0.8387	0.8384	0.8381
216.00	0.8378	0.8374	0.8372	0.8368
217.00	0.8365	0.8363	0.8360	0.8357
218.00	0.8354	0.8351	0.8348	0.8345
219.00	0.8342	0.8340	0.8337	0.8334
220.00	0.8331	0.8328	0.8325	0.8322
221.00	0.8320	0.8317	0.8315	0.8311
222.00	0.8309	0.8307	0.8303	0.8301
223.00	0.8299	0.8296	0.8293	0.8291
224.00	0.8288	0.8286	0.8283	0.8281
225.00	0.8278	0.8276	0.8273	0.8271
226.00	0.8268	0.8265	0.8263	0.8261
227.00	0.8259	0.8256	0.8253	0.8252
228.00	0.8249	0.8246	0.8244	0.8242
229.00	0.8240	0.8237	0.8235	0.8233
230.00	0.8230	0.8228	0.8226	0.8224
231.00	0.8221	0.8219	0.8217	0.8215
232.00	0.8213	0.8211	0.8209	0.8206
233.00	0.8204	0.8202	0.8200	0.8198
234.00	0.8196	0.8194	0.8192	0.8189
235.00	0.8188	0.8186	0.8184	0.8181
236.00	0.8180	0.8178	0.8175	0.8173
237.00	0.8172	0.8170	0.8168	0.8166

## Wilks formula for Women cont.

BWT in Pounds (lbs)	Interpolated Wilks Coefficients			
(1/4 lbs.) →	even	1/4	1/2	3/4
238.00	0.8164	0.8162	0.8160	0.8158
239.00	0.8156	0.8155	0.8153	0.8151
240.00	0.8149	0.8147	0.8145	0.8143
241.00	0.8142	0.8140	0.8138	0.8136
242.00	0.8134	0.8132	0.8131	0.8129
243.00	0.8127	0.8125	0.8124	0.8122
244.00	0.8120	0.8118	0.8117	0.8115
245.00	0.8113	0.8112	0.8110	0.8108
246.00	0.8106	0.8105	0.8103	0.8102
247.00	0.8100	0.8099	0.8097	0.8095
248.00	0.8093	0.8092	0.8090	0.8089
249.00	0.8087	0.8085	0.8084	0.8082
250.00	0.8081	0.8079	0.8078	0.8076
251.00	0.8075	0.8073	0.8071	0.8070
252.00	0.8068	0.8067	0.8065	0.8064
253.00	0.8062	0.8061	0.8059	0.8058
254.00	0.8056	0.8055	0.8053	0.8052
255.00	0.8050	0.8049	0.8047	0.8046
256.00	0.8045	0.8043	0.8042	0.8040
257.00	0.8038	0.8037	0.8036	0.8034
258.00	0.8033	0.8032	0.8030	0.8028
259.00	0.8027	0.8026	0.8024	0.8023
260.00	0.8022	0.8021	0.8019	0.8017
261.00	0.8016	0.8015	0.8013	0.8012
262.00	0.8011	0.8009	0.8008	0.8006
263.00	0.8005	0.8004	0.8003	0.8001
264.00	0.8000	0.7998	0.7997	0.7995
265.00	0.7994	0.7993	0.7992	0.7990
266.00	0.7988	0.7987	0.7986	0.7985
267.00	0.7984	0.7982	0.7981	0.7980
268.00	0.7978	0.7977	0.7975	0.7974
269.00	0.7973	0.7972	0.7971	0.7969
270.00	0.7968	0.7966	0.7965	0.7964
271.00	0.7963	0.7961	0.7960	0.7958
272.00	0.7957	0.7956	0.7955	0.7954
273.00	0.7952	0.7951	0.7949	0.7948
274.00	0.7947	0.7946	0.7945	0.7943
275.00	0.7942	0.7941	0.7939	0.7938

Wilks formula for Women cont.

BWT in Pounds (lbs)	Interpolated Wilks Coefficients			
(1/4 lbs.) →	even	1/4	1/2	3/4
276.00	0.7937	0.7936	0.7934	0.7933
277.00	0.7932	0.7930	0.7929	0.7928
278.00	0.7927	0.7926	0.7924	0.7923
279.00	0.7922	0.7920	0.7919	0.7918
280.00	0.7917	0.7915	0.7914	0.7913
281.00	0.7911	0.7910	0.7909	0.7908
282.00	0.7907	0.7905	0.7904	0.7902
283.00	0.7901	0.7900	0.7899	0.7898
284.00	0.7897	0.7895	0.7894	0.7892
285.00	0.7891	0.7890	0.7889	0.7888
286.00	0.7887	0.7885	0.7883	0.7882
287.00	0.7881	0.7880	0.7879	0.7878
288.00	0.7877	0.7876	0.7874	0.7872
289.00	0.7871	0.7870	0.7869	0.7868
290.00	0.7867	0.7865	0.7864	0.7862
291.00	0.7861	0.7860	0.7859	0.7858
292.00	0.7857	0.7855	0.7854	0.7853
293.00	0.7852	0.7850	0.7849	0.7848
294.00	0.7846	0.7845	0.7844	0.7843
295.00	0.7842	0.7841	0.7839	0.7838
296.00	0.7836	0.7835	0.7834	0.7833
297.00	0.7832	0.7831	0.7830	0.7828
298.00	0.7827	0.7825	0.7824	0.7823
299.00	0.7822	0.7821	0.7820	0.7818
300.00	0.7817	0.7816	0.7815	0.7814
301.00	0.7813	0.7812	0.7810	0.7808
302.00	0.7807	0.7806	0.7805	0.7804
303.00	0.7803	0.7802	0.7800	0.7799
304.00	0.7798	0.7797	0.7796	0.7795
305.00	0.7794	0.7792	0.7791	0.7790
306.00	0.7789	0.7787	0.7786	0.7785
307.00	0.7783	0.7782	0.7781	0.7780
308.00	0.7779	0.7778	0.7777	0.7776
309.00	0.7774	0.7773	0.7772	0.7771
310.00	0.7770	0.7769	0.7768	0.7766
311.00	0.7765	0.7764	0.7763	0.7762
312.00	0.7761	0.7760	0.7759	0.7758
313.00	0.7757	0.7756	0.7755	0.7754

Wilks formula for Women cont.

BWT in Pounds (lbs)	Interpolated Wilks Coefficients			
(1/4 lbs.) →	even	1/4	1/2	3/4
314.00	0.7753	0.7752	0.7750	0.7749
315.00	0.7748	0.7747	0.7746	0.7745
316.00	0.7744	0.7744	0.7742	0.7741
317.00	0.7740	0.7739	0.7738	0.7737
318.00	0.7736	0.7735	0.7734	0.7733
319.00	0.7732	0.7731	0.7730	0.7730
320.00	0.7729	0.7727	0.7726	0.7725
321.00	0.7725	0.7724	0.7723	0.7722
322.00	0.7721	0.7720	0.7719	0.7718
323.00	0.7717	0.7717	0.7716	0.7715
324.00	0.7714	0.7713	0.7712	0.7712
325.00	0.7711	0.7710	0.7709	0.7708
326.00	0.7707	0.7707	0.7706	0.7705
327.00	0.7705	0.7704	0.7703	0.7702
328.00	0.7702	0.7701	0.7700	0.7700
329.00	0.7699	0.7699	0.7698	0.7697
330.00	0.7696	0.7696	0.7695	0.7695
331.00	0.7694	0.7693	0.7693	0.7692
332.00	0.7692	0.7691	0.7691	0.7691

# Kilos to Pounds Conversion Table

<u>Kilo</u>	<u>Pound</u>	<u>Kilo</u>	<u>Pound</u>	<u>Kilo</u>	<u>Pound</u>	<u>Kilo</u>	<u>Pound</u>	<u>Kilo</u>	<u>Pound</u>
40	88.2	127.5	281.1	215	474	302.5	666.89	390	859.79
42.5	93.7	130	286.6	217.5	479.5	305	672.4	392.5	865.31
45	99.2	132.5	292.1	220	485.01	307.5	677.91	395	870.82
47.5	104.7	135	297.6	222.5	490.52	310	683.43	397.5	876.33
50	110.2	137.5	303.1	225	496.04	312.5	688.94	400	881.84
52.5	115.7	140	308.6	227.5	501.55	315	694.45	402.5	887.35
55	121.3	142.5	314.2	230	507.06	317.5	699.96	405	892.86
57.5	126.8	145	319.7	232.5	512.57	320	705.47	407.5	898.37
60	132.3	147.5	325.2	235	518.08	322.5	710.98	410	903.89
62.5	137.8	150	330.7	237.5	523.59	325	716.5	412.5	909.4
65	143.3	152.5	336.2	240	529.1	327.5	722.01	415	914.91
67.5	148.8	155	341.7	242.5	534.62	330	727.52	417.5	920.42
70	154.3	157.5	347.2	245	540.13	332.5	733.03	420	925.9
72.5	159.8	160	352.7	247.5	545.64	335	738.54	422.5	931.4
75	165.3	162.5	358.2	250	551.15	337.5	744.05	425	937
77.5	170.9	165	363.8	252.5	556.66	340	749.56	427.5	942.5
80	176.4	167.5	369.3	255	562.17	342.5	755.08	430	948
82.5	181.9	170	374.8	257.5	567.68	345	760.59	432.5	953.5
85	187.4	172.5	380.3	260	573.2	347.5	766.1	435	959
87.5	192.9	175	385.8	262.5	578.71	350	771.61	437.5	964.5
90	198.4	177.5	391.3	265	584.22	352.5	777.12	440	970
92.5	203.9	180	396.8	267.5	589.73	355	782.63	442.5	975.5
95	209.4	182.5	402.3	270	595.24	357.5	788.14	445	981
97.5	214.9	185	407.9	272.5	600.75	360	793.66	447.5	986.6
100	220.5	187.5	413.4	275	606.27	362.5	799.17	450	992.1
102.5	226	190	418.9	277.5	611.78	365	804.68	452.5	997.6
105	231.5	192.5	424.4	280	617.29	367.5	810.19	455	1003.1
107.5	237	195	429.9	282.5	622.8	370	815.7		
110	242.5	197.5	435.4	285	628.31	372.5	821.21		
112.5	248	200	440.9	287.5	633.82	375	826.73		
115	253.5	202.5	446.4	290	639.33	377.5	832.24		
117.5	259	205	451.9	292.5	644.85	380	837.75		
120	264.6	207.5	457.5	295	650.36	382.5	843.26		
122.5	270.1	210	463	297.5	655.87	385	848.77		
125	275.6	212.5	468.5	300	661.38	387.5	854.28		