# TRACK & FIELD



# METRIC MANUAL FOR FIELD EVENTS

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#### **IHSA METRIC MANUAL FOR FIELD EVENTS**

#### Introduction:

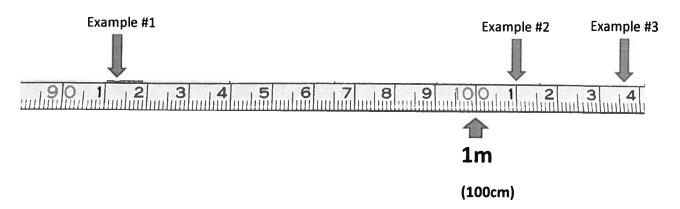
For the 2020 Boys and Girls Track and Field State Series, the Track and Field Advisory Committee made a recommendation to conduct all field events using metric measurements. This recommendation was supported by the Athletic Directors Advisory Committee and the IHSA Board of Directors. The Track and Field Advisory Committee's rationale for the change asserts that the NFHS permits either metric or English measurements in field events. Although English measurements are common in high school field events, measuring of fractions can sometimes be difficult to determine which can lead to questions of accuracy. Going to metric allows us to use factors of ten anywhere on the measuring tape. Also, at the state final meet, the laser measurement devices and programs for the field events are more easily coordinated when using metric units. Lastly, outside of the high school community, metric measurements for field events is widely accepted as the national and international standard.

The purpose of this manual is to provide guidance for schools, officials and IHSA State Series Hosts as we make the transition to metric measurements in the field events. This manual will provide some basic information regarding metrics, include the new metric state qualifying standards for field events, include some general instructions for using metrics in each of the field events, provide an explanation for how the IHSA will address state field event records in metrics, and include a metric to English conversion chart that can be used as a point of reference.

Although metric measurements in the field events are not required for regular season meets, we highly encourage regular season hosts to adopt this method of measurement to help acclimate student athletes, coaches, officials, and spectators to this practice before they experience it throughout the IHSA State Series.

#### **METRICS 101**

#### Using the METRIC SYSTEM for Measuring in the Field Events



- 1. In all field events the measurement shall be to the nearest lesser centimeter.
- 2. So, instead of feet and inches, the measurement will be in meters and centimeters.
- 3. There are 100 centimeters in a meter.
- 4. For reference there are 39.37 inches in a meter.

So, let's look at some examples from the illustration above:

What would be the correct measurements in examples # 1,2,& 3

- 1. 0.91 or 0 meters and 91 centimeters
- 2. 1.01 or 1 meter and 1 centimeter
- 3. 1.03 or 1 meter and 3 centimeters (Remember that although the Example #3 arrow is closer to 4 centimeters, we measure using the **nearest lesser centimeter**).

Note: Although most measuring tapes used for track and field have the English measurements on one side of the tape and the metric measurements on the other side of the tape, it is possible that some measuring tapes will only include the English measurements.

Therefore, it would be a good idea to check your track and field measuring tapes prior to conducting meets to make sure that they can accommodate metric measurements.

#### IHSA BOYS AND GIRLS FIELD EVENT QUALIFYING STANDRDS

In order to qualify in a field event for the IHSA State Final Meet, an athlete must either place 1<sup>st</sup> or 2<sup>nd</sup> in the field event at the IHSA Sectional Meet. For athletes who do not achieve 1<sup>st</sup> or 2<sup>nd</sup> place, he/she must achieve the qualifying standard listed below for that event.

	2019-2020					
EVENT	1A GIRLS	1A BOYS	2A GIRLS	2A BOYS	3A GIRLS	3A BOYS
LJ	5.00m	6.35m	5.20m	6.57m	5.35m	6.75m
	(16-5)	(20-10)	(17-1)	(21-7)	(17-7)	(22-2)
PV	2.74m	3.70m	2.97m	13-0	3.12m	4.16m
	(9-0)	′ (12-2)	(9-9)	(3.96m)	(10-3)	(13-8)
HJ	1.52m	1.85m	1.54m	1.87m	1.60m	1.90m
	(5-0)	(6-1)	(5-1)	(6-2)	(5-3)	(6-3)
SP	10.97m	14.60m	36-7	14.80m	11.76m	15.97m
	(36-0)	(47-11)	(11.15m)	(48-7)	(38-7)	(52-5)
TJ	10.33m	12.57m	10.64m	13.05m	11.09m	13.61m
	(33-11)	(41-3)	(34-11)	(42-10)	(36-5)	(44-8)
DISC	34.03m	43.05m	34.21m	44.24m	36.29m	46.71m
	(111-8)	(141-3)	(112-3)	(145-2)	(119-1)	(153-3)

2019-2020		
EVENT	GIRLS WHEELCHAIR	BOYS WHEELCHAIR
SP	1.22m (4-0)	1.83m (6-0)
DISC	2.44m (8-0)	4.75m (15-0)

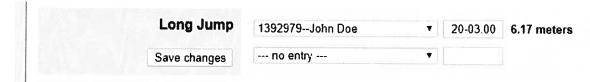
Note: The field event qualifying standards above show both the metric distances/heights along with the English distances/heights in parenthesis. The metric measurements will be used in determining qualifying marks for all field events. The English measurement conversions in parenthesis are only listed for convenience and are not necessarily exact conversions. Therefore, at the sectional meets, the metric distances/heights are what will be used to determine if a qualifying standard has been met by a competitor. In other words, the English conversions listed in parenthesis will not be used or considered to determine if a qualifying standard was met.

#### IHSA STATE SERIES FIELD EVENT ENTRIES AND SEEDING

Again, although it is highly encouraged to expose student athletes, coaches, officials and spectators to using metric measurements during the <u>regular track and field season</u>, it is not required. However, as previously stated, metric measurements will be the only method used throughout the IHSA State Series.

#### **Completing Field Event Entries in the List of Participants:**

As in the past, when completing the List of Participants (LOP) in Schools Center, every field event entry should be accompanied by the participants best distance/height for the season in that field event. In the event that a participant entry for a field event was only able to secure an English measurement during the regular season, then the coach can enter the English distance/height for seeding. However, when the entry is saved in the LOP, the program will automatically convert the English distance/height to metric (See illustration below).



#### **Sectional Seeding:**

In reference to the illustration above, I entered John Doe in the long jump, and his best jump for the season was recorded as an English distance at 20-3. Once I clicked "Save changes", the metric conversion of 6.17 meters appeared to the right of my entry. In this case, the metric distance of 6.17 meters is what will be used to seed John Doe in the long jump at his school's assigned sectional.

#### **METRICS AND THE HORIZONTAL JUMPS**

#### Long Jump and Triple Jump:

Per NFHS Rule 6-9, keep the following in mind as it pertains to metrics in the long jump and triple jump:

#### **Runway and Pit:**

Any measurements of runway and pit dimensions can be done using either the metric or English system.

Runway length: minimum of 39.62 meters (130-0)

recommended 45 meters (147-6) from long jump foul line

Runway width: between 1.07 meters (42in.) and 1.22 meters (48in.)

Pit length: 7 meters (23-0) if constructed after 2019 (if before 2019

then the minimum length is 4.572 meters (15-0))

Pit Width: minimum of 2.75 meters (9-0)

Pit Depth: 30 centimeters (12in.) of sand or other soft material

#### Take-off Boards:

Since take-off boards are customarily built into the runway or painted onto the runway, the take-off board distances from the pit may have been established using either the metric or the English system. Additionally, the games committee can establish if alternate boards are permissible.

**Suggested** take-off board distances: Girls Long Jump – 2.5 meters (8-0)

Boys Long Jump – 3.7 meters (12-0)

Girls Triple Jump – 7.3 meters (24-0)

Boys Triple Jump – 9.8 meters (32-0)

#### **Measuring Device:**

Per NFHS Rules, the measuring device shall be made with non-stretchable tape such as fiberglass, nylon, steel, or a certified scientific measurement device (laser). **Measuring tapes must be able to measure in metric units**.

All fair long and triple jump attempts must be measured perpendicularly to the foul line from the point in the pit touched by the person or the apparel of the person which is nearest the foul line. All measurements must be to the nearest lesser centimeter. The distance of the jump shall be stated loudly/clearly in meters and centimeters.

#### **METRICS AND THE VERTICAL JUMPS**

#### **High Jump:**

Per NFHS Rule 6-4, keep the following in mind as it pertains to metrics in the high jump:

#### **Landing Pad:**

Any measurements of the landing pad dimensions can be done using either the metric or English system.

Pad width:

not less than 4.80 meters (16-0)

Pad depth:

not less than 2.40 meters (8-0)

Pad thickness:

60 centimeters (24in.) foam rubber or shock-absorbing synthetic soft material OR 45 centimeters (18in.) encased

synthetic soft material OK 45 centimeters (10m.) end

commercially compressed foam rubber mattress

Note: if landing pad is made up of two or more sections, then a common cover must extend over all sections.

#### Standards and Non-metal Crossbar:

Any measurements of the standard or crossbar dimensions can be done using either the metric or English system:

Standards – must be at least 12 feet apart with rectangular planes that support and run parallel to the crossbar. The planes shall measure 1 ½ in. by 2 3/8in. Most high jump standards show both the metric and English measurements. However, it may be possible that some standards do not include metric measurements. If standards do not show metric measurements, it is not necessary to purchase new standards as measurements can be made with a non-stretchable tape such as fiberglass, nylon, steel or certified scientific measurement device (laser). These measurements should always be made from the surface of the take-off point to the lowest point on the top of the crossbar.

Non-metal Crossbar length:

minimum of 3.66 meters (12-0)

maximum of 4.52 meters (14-10)

Non-metal Crossbar weight:

not more than 5lbs.

Starting Height & Successive Heights of the Crossbar for the High Jump:

NFHS Rule 3-2-3j establishes that this may be determined by the games committee. However, regardless of the starting height, a suggestion for determining successive heights using metric measurements includes:

Raise the crossbar 5 centimeters (approx. 2in.) until there is a narrow field of competitors remaining. At which point, successive heights can be reduced to 2 centimeters (approx. 1in.). When only one competitor remains and is declared the winner, then that competitor can determine successive heights.

Breaking ties: procedures for breaking ties in the high jump are explained in NFHS Rule 6-3-2b. Any time 6-3-2b is applied and a "jump off" is required, then the rules explain that the crossbar will either be raised or lowered during the "jump off" in increments of 2 centimeters (approx. 1in.).

#### **Pole Vault:**

Per NFHS Rule 6-4, keep the following in mind as it pertains to metrics in the pole vault:

#### **Runway and Landing Pad:**

For complete measurements concerning the pole vault landing system and equipment, reference NFHS Rule 6-5.

Any measurements of the runway or landing pad dimensions can be done using either the metric or English system.

Runway length: minimum 40 meters (130-0)

recommended 45 meters (147-6)

Runway width: between 1.07 meters (42in.) and

1.22 meters (48in.)

Pad width: minimum 6 meters (19-8)

Pad depth: minimum 6.1468 meters (20-2)

Pad depth from back of planting box: minimum 5 meters (16-5)

Front Buns width: minimum 5 meters (16-5)

Cutout width for Planting Box: maximum 914 millimeters (36in.)

#### **Planting Box:**

For metric specifications of the planting box, refer to NFHS Rule 6-5-12, 13, and 14 and Figures 3, 4 and 5 in the NFHS Rule Book.

#### Standards and Non-metal Crossbar:

Any measurements of the standard or crossbar dimensions can be done using either the metric or English system:

Standards – The width between the pins that support the non-metal crossbar shall be no less than 4.16 meters (13-8) and no more than 4.48 meters (14-8). The pins must be 13 millimeters (1/2 in.) thick and no more than 76 millimeters (3 in.) long. Most pole vault standards show both the metric and English measurements. However, it may be possible that some standards do not include metric measurements. If standards do not show metric measurements, it is not necessary to purchase new standards as measurements can be made with a non-stretchable tape such as fiberglass, nylon, steel or certified scientific measurement device (laser). These measurements should always be made from the surface of take-off point to the lowest point on the top of the crossbar.

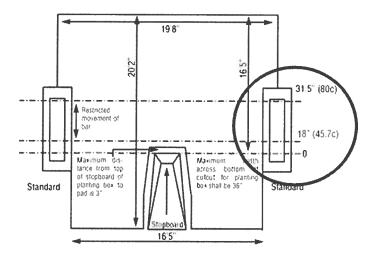
Non-metal Crossbar length: minimum of 4.47 meters (14-8)

maximum of 4.52 meters (14-10)

Non-metal Crossbar weight: not more than 5lbs.

#### **Positioning of Standards:**

When the competitor has the standards set to position the crossbar at a specific depth, the metric measurement shall be used if possible. It may be positioned between 45.7 centimeters (18 in.) and 80 centimeters (31 ½ in.). See the illustration below.



#### **Competitor Weigh-in and Poles:**

As per NFHS Rule 6-5-3 and 4, a competitor's weight must be at or below the manufacturer's pole rating. This is determined through a weigh-in and pole inspection

prior to the meet. The competitor's weight will still be measured using the English system (lbs./oz.) for the purpose of determining what their pole rating must be. As a reminder, competitors cannot use variable weight poles.

#### Starting Height & Successive Heights of the Crossbar for the Pole Vault:

NFHS Rule 3-2-3j establishes that this may be determined by the games committee. However, regardless of the starting height, a suggestion for determining successive heights using metric measurements includes:

Raise the crossbar 15 centimeters (approx. 6in.) until there is a narrow field of competitors remaining. At which point, successive heights can be reduced to 7 centimeters (approx. 3in.) or 5 centimeters (approx. 2in.). When only one competitor remains and is declared the winner, then that competitor can determine successive heights.

Breaking ties: procedures for breaking ties in the pole vault are explained in NFHS Rule 6-3-2b. Any time 6-3-2b is applied and a "jump off" is required, then the rules explain that the crossbar will either be raised or lowered during the "jump off" in increments of 7 centimeters (approx. 3in.).

#### **METRICS AND THE THROWING EVENTS**

#### **Discus Throw:**

Per NFHS Rule 6-6, keep the following in mind as it pertains to metrics in the Discus:

<b>Boys Discus:</b>		Girls Discus:	
Weight Diameter	1.6kg min. 209mm	Weight Diameter	1.0kg min. 180mm max. 182mm
Diameter of Core	max. 211mm min. 50mm max. 57mm	Diameter of Core	min. 50mm max. 57mm
Thickness of center	min. 40mm max. 42mm	Thickness of center	min. 37mm max. 39mm
Rim Thickness ¼" from edge	min. 12mm	Rim Thickness ¼" from edge	min. 12mm max. 13mm
Radius of Edge	max.13mm 6mm	Radius of Edge	6mm

Note: If possible, the implements shall be weighed/measured using metric units. English implement weights/measurements can be found in the NFHS Rule book (6-6-2).

Note: The size and weight of the discus and shot for the wheelchair division shall be the same as those outlined above.

#### **Throwing Circle:**

Any measurements of throwing circle can be done using either the metric or English system.

Circle Diameter: 2.50 meters (8-2 ½)

Circle Band: 1.9 centimeters thick (3/4 inch)

Painted line

(in lieu of band) 5 centimeters wide (2 inches)

Painted line (establishing

back ½ of throwing circle) 5 centimeters wide (2 inches); 20 centimeters long (8 inches)

Note: For information on setting up the throwing sector and discus cage, reference appendix A and B in the NFHS Rule Book.

#### **Measuring Device:**

Per NFHS Rules, the measuring device shall be made with non-stretchable tape such as fiberglass, nylon, steel, or a certified scientific measurement device (laser). **Measuring tapes must be able to measure in metric units**.

All fair discus throw attempts must be measured from the nearest edge of the first mark made by the discus to the inside edge of the throwing circle nearest such mark, measured along an extended radius of the circle. All measurements must be to the nearest lesser centimeter. The distance of the throw shall be stated loudly/clearly in meters and centimeters.

#### **Shot Put:**

Per NFHS Rule 6-7, keep the following in mind as it pertains to metrics in the Shot Put:

Boys Shot Put: Girls Shot Put:

Weight min. 5.443kg Weight min. 4.0kg
Diameter min. 98.4mm Diameter min. 95mm
max. 117.5mm max. 110mm
Circumference min. 30.91cm Circumference min. 29.84cm

Note: If possible, the implements shall be weighed/measured using metric units. English implement weights/measurements can be found in the NFHS Rule book (6-7-2).

Note: The size and weight of the discus and shot for the wheelchair division shall be the same as those outlined above.

max. 34.56

#### **Throwing Circle:**

Any measurements of throwing circle can be done using either the metric or English system.

Circle Diameter: 2.134 meters (7-0)

Circle Band: 1.9 centimeters thick (3/4 inch)

Painted line

(in lieu of band) 5 centimeters wide (2 inches)

Stopboard (arc shaped

constructed of hard surfaced

material): 1.22 meters (4-0) long along inside surface

10 centimeters (4 inches) high

11.4 centimeters (4 ½ inches) wide

Painted line (establishing

back ½ of throwing circle) 5 centimeters wide (2 inches) 20 centimeters long (8 inches)

Note: For information on setting up the throwing sector, reference NFHS Rules 6-7-5 as well as appendix B in the NFHS Rule Book.

#### **Measuring Device:**

Per NFHS Rules, the measuring device shall be made with non-stretchable tape such as fiberglass, nylon, steel, or a certified scientific measurement device (laser). **Measuring tapes must be able to measure in metric units**.

All fair shot attempts must be measured from the nearest edge of the first mark made by the shot to the inside edge of the stopboard nearest such mark, measured along an extended radius of the circle. All measurements must be to the nearest lesser centimeter. The distance of the throw shall be stated loudly/clearly in meters and centimeters.

#### **METRICS AND IHSA STATE FIELD EVENT RECORDS**

#### **Current State Records:**

IHSA Boys and Girls State Field Event Records have been converted to their exact metric measurements. These conversions were NOT rounded to the nearest centimeter. This was done to provide full metric credit to state record holders in the field events (See illustration from the IHSA Girls Track and Field webpage below).

#### shot put

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National — 57-1 1/4, Alyssa Wilson, Jackson (Toms River Donovan Catholic), NJ, 2017 IHSA — 15.5448 m (51-0), Kathleen Young, Warrensburg (W.-Latham), 2016 (finals) Class 1A — 15.5448 m (51-0), Kathleen Young, Warrensburg (W.-Latham), 2016 (finals) Class 2A — 15.2019 m (49-10 1/2), Daniella Bunch, Mahomet (M.-Seymour), 2009 (finals) Class 3A — 15.4813 m (50-9 1/2), Emmonnie Henderson, Edwardsville (H.S.), 2013 (finals)
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#### discus throw

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National — 191-6, Shelbi Vaughan, Mansfield, TX, 2012

IHSA — 51.0032 m (167-4), Kelsey Card, Carlinville, 2010 (finals)

Class 1A — 51.0032 m (167-4). Kelsey Card, Carlinville, 2010 (finals)

Class 2A — 44.3992 m (145-8). Tayla Schwarz, Dixon (H.S.), 2016 (finals)

Class 3A — 49.0982 m (161-1). Emmonnie Henderson. Edwardsville (H.S.), 2011 (prelims)
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Notice that the original English measurement is also listed in parenthesis.

#### **Breaking State Records:**

From this point forward, only the metric distance measured to the nearest lesser centimeter can be used to establish a new record in a field event. For example, using the above illustration, the IHSA record in the discus established by Kelsey Card with a throw of 51.0032m will only be able to be broken with a throw of 51.01m (in other words, the next highest centimeter).

High	High Jump		
Metric Height	English Equivalent (approximate)		
1.40	4'7"		
1.50	4'11"		
1.60	5′3″		
1.70	5′7″		
1.80	5′10 ¾″		
1.90	6′2 ¾″		
2.00	6'6 ¾"		
2.10	6′10 ¾″		
2.20	7′2 ½″		
2.30	7'6 ½"		

Pole Vault	
Metric Height	English Equivalent (approximate)
2.20	7'2 ½"
2.30	7'6 ½"
2.40	7′10 ½″
2.50	8'2 ½"
2.60	8'6 ¼"
2.70	8'10 ¼"
2.80	9'2 ¼"
2.90	9'6 ¼"
3.00	9'10"
3.10	10'2"
3.20	10'6"
3.30	10′10″
3.40	11'1 ¾"
3.50	11′5 ¾″
3.60	11′9 ¾″
3.70	12′1 ½″
3.80	12'5 ½"
3.90	12'9 ½"
4.00	13′1 ½″
4.10	13'5 ¼"
4.20	13'9 ¼"
4.30	14'1 ¼"
4.40	14'5 ¼"
4.50	14'9"
4.60	15′1″
4.70	15′5″
4.80	15′9″
4.90	16′0 ¾″
5.00	16'4 ¾"
5.10	16'8 ¾"
5.20	17′0 ¾″
5.30	17'4 ½"
5.40	17′8 ½"
5.50	18′0 ½″
5.60	18'4 ½"
5.70	18'8 ¼"

Long Jump		
Metric Distance	English Equivalent (approximate)	
4.00	13′1 ½″	
4.10	13'5 ¼"	
4.20	13′9 ¼″	
4.30	14'1 ¼"	
4.40	14'5 ¼"	
4.50	14'9"	
4.60	15'1"	
4.70	15'5"	
4.80	15'9"	
4.90	16′0 ¾″	
5.00	16'4 ¾"	
5.10	16'8 ¾"	
5.20	17′0 ¾″	
5.30	17'4 ½"	
5.40	17'8 ½"	
5.50	18'0 ½"	
5.60	18'4 ½"	
5.70	18'8 ¼"	
5.80	19'0 ¼"	
5.90	19'4 ¼"	
6.00	19'8 ¼"	
6.10	20′0″	
6.20	20'4"	
6.30	20'8"	
6.40	21′0″	
6.50	21′3 ¾″	
6.60	21′7 ¾″	
6.70	21′11 ¾″	
6.80	22′3 ¾″	
6.90	22'7 ½"	
7.00	22′11 ½″	
7.10	23′3 ½″	
7.20	23′7 ½″	
7.30	23′11 ¼″	
7.40	24′3 ¼″	
7.50	24′7 ¼″	
7.60	24′11 ¼″	
7.70	25′3″	
7.80	25′7″	
7.90	25′11″	

Triple Jump		
Metric Distance	English Equivalent (approximate)	
7.40	24'3 ¼"	
7.50	24'7 ¼"	
7.60	24'11 ¼"	
7.70	25'3"	
7.80	25′7″	
7.90	25'11"	

Triple Jump (continued)		
Metric Distance	English Equivalent	
	(approximate)	
8.00	26'3"	
8.10	26'6 ¾"	
8.20	26′10 ¾″	
8.30	27'2 ¾"	
8.40	27'6 ¾"	
8.50	27′ 10 ½"	
8.60	28'2 ½"	
8.70	28'6 ½"	
8.80	28′10 ½″	
8.90	29'2 ¼"	
9.00	29'6 ¼"	
9.10	29'10 ¼"	
9.20	30'2 ¼"	
9.30	30'6"	
9.40	30'10"	
9.50	31'2"	
9.60	31'6"	
9.70	31′9 ¾″	
9.80	32'1 ¾"	
9.90	32′5 ¾″	
10.00	32'9 ¾"	
10.10	33'1 ½"	
10.20	33′5 ½″	
10.30	33′9 ½″	
10.40	34′1 ½″	
10.50	34'5 ¼"	
10.60	34′9 ¼″	
10.70	35'1 ¼"	
10.80	35'5 ¼"	
10.90	35′9″	
11.00	36'1"	
11.10	36′5″	
11.20	36′9″	
11.30	37'0 ¾"	
11.40	37'4" ¾"	
11.50	37′8 ¾″	
11.60	38'0 ¾"	
11.70	38'4 ½"	
11.80	38′8 ½″	
11.90	39'0 ½"	
12.00	39'4 ½"	
12.10	39'8 ¼"	
12.20	40'0 ¼"	
12.30	40'4 ¼"	
12.40	40'8 ¼"	
12.50	41′0″	
12.60	41'4"	
12.70	41'8"	
12.80	42'0"	
12.90	42'3 ¾"	

Triple Jump (continued)		
Metric Distance	English Equivalent (approximate)	
13.00	42'7 ¾"	
13.10	42'11 3/4"	
13.20	43'3 ¾"	
13.30	43'7 ½"	
13.40	43′11 ½″	
13.50	44'3 ½"	
13.60	44'7 ½"	
13.70	44'11 ½"	
13.80	45'3 ¼"	
13.90	45'7 ¼"	
14.00	45′11 ¼″	
14.10	46'3"	
14.20	46'7"	
14.30	46'11"	
14.40	47'3"	
14.50	47′6 ¾″	
14.60	47′10 ¾″	
14.70	48'2 ¾"	
14.80	48'6 ¾"	
14.90	48′10 ½″	
15.00	49'2 ½"	
15.10	49'6 ½"	
15.20	49′10 ½"	
15.30	50′2 ¼″	
15.40	50'6 ¼"	
15.50	50′10 ¼″	
15.60	51′2 ¼″	
15.70	51'6"	
15.80	51'10"	
15.90	52'2"	
16.00	52'6"	
16.10	52'9 ¾"	
16.20	53′1 ¾″	
16.30	53'5 ¾"	
16.40	53'9 ½"	
16.50	54'1 ½"	
16.60	54'5 ½"	
16.70	54'9 ½"	
16.80	55'1 ¼"	
16.90	55′5 ¼″	

Shot Put		
Metric Height	English Equivalent (approximate)	
7.00	22'11 ½"	
7.10	23′3 ½″	
7.20	23′7 ½″	
7.30	23′11 ¼″	
7.40	24'3 ¼"	

Shot Put (continued)		
Metric Distance	English Equivalent	
	(approximate)	
7.50	24'7 ¼"	
7.60	24'11 ¼"	
7.70	25'3"	
7.80	25'7"	
7.90	25′11″	
8.00	26'3"	
8.10	26'6 ¾"	
8.20	26'10 ¾"	
8.30	27'2 ¾"	
8.40	27'6 ¾"	
8.50	27′10 ½"	
8.60	28'2 ½"	
8.70	28'6 ½"	
8.80		
	28'10 ½"	
8.90	29'2 ¼"	
9.00	29'6 ¼"	
9.10	29′10 ¼″	
9.20	30′2 ¼″	
9.30	30′6″	
9.40	30′10″	
9.50	31′2″	
9.60	31′6″	
9.70	31′9 ¾″	
9.80	32′1 ¾″	
9.90	32′5 ¾″	
10.00	32′9 ¾″	
10.10	33′1 ½″	
10.20	33′5 ½″	
10.30	33'9 ½"	
10.40	34'1 ½"	
10.50	34′5 ¼″	
10.60	34'9 ¼"	
10.70	35′1 ¼″	
10.80	35'5 ¼"	
10.90	35′9″	
11.00	36'1"	
11.10	36′5″	
11.20	36'9"	
11.30	37'0 ¾"	
11.40	37'4" ¾"	
11.50	37'8 ¾"	
11.60	38'0 ¾"	
11.70	38'4 ½"	
11.80	38'8 ½"	
11.90	39'0 ½"	
12.00	39'4 ½"	
12.10	39'8 ¼"	
12.10	40'0 ¼"	
12.20	40'4 ¼"	
12.30	40'8 ¼"	
12.40	41'0"	
	41'4"	
12.60		
12.70	41'8"	

Shot Put (continued)	
Metric Distance	English Equivalent
12.00	(approximate)
12.80	42'0"
12.90	42'3 ¾" 42'7 ¾"
13.10	42 / % 42'11 %"
13.20	43'3 3/"
13.30	43'7 ½"
13.40	43'11 ½"
13.50	44'3 ½"
13.60	44'7 ½"
13.70	44'11 ¼"
13.80	45'3 ¼"
13.90	45'7 ¼"
14.00	45'11 ¼"
14.10	46'3"
14.20	46'7"
14.30	46′11″
14.40	47'3"
14.50	47′6 ¾″
14.60	47′10 ¾″
14.70	48'2 ¾"
14.80	48'6 ¾"
14.90	48′10 ½"
15.00	49'2 ½"
15.10	49'6 ½"
15.20	49'10 ½"
15.30	50'2 ¼"
15.40	50'6 ¼"
15.50	50′10 ¼"
15.60	51'2 ¼"
15.70	51'6"
15.80	51'10"
15.90	52'2"
16.00	52'6"
16.10	52′9 ¾″
16.20	53′1 ¾″
16.30	53′5 ¾″
16.40	53'9 ½"
16.50	54′1 ½″
16.60	54'5 ½"
16.70	54'9 ½"
16.80	55′1 ¼″
16.90	55'5 ¼"
17.00	55'9 ¼"
17.10	56′1 ¼″
17.20	56′5″
17.30	56′9″
17.40	57′1″
17.50	57′5″
17.60	57′8 ¾″
17.70	58'0 ¾"
17.80	58'4 ¾"
17.90	58'8 ¾"

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Shot Put (continued)	
Metric Distance	English Equivalent (approximate)
18.00	59' ½"
18.10	59'4 ½"
18.20	59'8 ½"
18.30	60′0 ½″
18.40	60′4 ¼″
18.50	60'8 ¼"
18.60	61′0 ¼″
18.70	61'4 ¼"
18.80	61'8"
18.90	62'0"
19.00	62'4"
19.10	62'8"
19.20	62'11 ¾"
19.30	63′3 ¾″
19.40	63′7 ¾″
19.50	63′11 ¾″
19.60	64'3 1/2"
19.70	64'7 ½"
19.80	64′11 ½″
19.90	65′3 ½″
20.00	65′7 ¼″
20.10	65'11 ¼"
20.20	66′3 ¼″
20.30	66′7 ¼″
20.40	66'11"
20.50	67'3"
20.60	67'7"
20.70	67'11"
20.80	68'2 34"
20.90	68'6 34"
21.00	68'10 ¾"
	69'2 ¾"
21.10	1
21.20	69'6 ½"
21.30	69′10 ½″
21.40	70′2 ½″
21.50	70′6 ½″
21.60	70′10 ¼″
21.70	71′2 ¼″
21.80	71'6 ¼"
21.90	71′10 ¼″
22.00	72'2"
22.10	72′6″
22.20	72′10″
22.30	73′2″
22.40	73′5 ¾″
22.50	73′9 ¾″
22.60	74′1 ¾″
22.70	74′5 ¾″
22.80	74′9 ½"
22.90	75′1 ½″
23.00	75′5 ½″
25.00	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

Discus		
Metric Distance English Equivalent		
	(approximate)	
11.00	36'1"	
11.25	36'11"	
11.50	37'8"	
11.75	38'6"	
12.00	39'4"	
12.25	40'2"	
12.50	41′0″	
12.75	41′10″	
13.00	42'8"	
13.25	43′5″	
13.50	44′3″	
13.75	45′1″	
14.00	45'11"	
14.25	46'9"	
14.50	47′7″	
14.75	48'4"	
15.00	49'2"	
15.25	50'0"	
15.50	50'10"	
15.75	51'8"	
16.00	52'6"	
16.25	53′3″	
16.50	54'1"	
16.75	54'11"	
17.00	55′9″	
17.25	56'7"	
17.50	57'5"	
17.75	58'3"	
18.00	59'0"	
18.25	59'10" 60'8"	
18.50	61'6"	
18.75		
19.00	62'4" 63'2"	
19.25 19.50	63'11"	
19.75	64'9"	
20.00	65'7"	
20.00	66'5"	
20.23	67'3"	
20.75	68'1"	
21.00	68'10"	
21.25	69'8"	
21.50	70'6"	
21.75	71'4"	
22.00	72'2"	
22.25	73'0"	
22.50	73′10″	
22.75	74'7"	
23.00	75′5″	
23.25	76'3"	
23.50	77'1"	
23.75	77′11″	

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Discus	
Metric Distance	English Equivalent
24.00	(approximate)
24.00	78′9″
24.25	79'6"
24.50	80'4"
24.75	81'2"
25.00	82'0"
25.25	82'10"
25.50	83'8"
25.75	84'5"
26.00	85'3"
26.25	86'1"
26.50	86'11"
26.75	87'9"
27.00	88'7"
27.25	89′5″
27.50	90'2"
27.75	91′0″
28.00	91′10″
28.25	92′8″
28.50	93'6"
28.75	94'4"
29.00	95'1"
29.25	95'11"
29.50	96'9"
29.75	97'7"
	<del></del>
30.00	98'5"
30.25	99'3"
30.50	100'0"
30.75	100'10"
31.00	101'8"
31.25	102'6"
31.50	103'4"
31.75	104'2"
32.00	105′0″
32.25	105′9″
32.50	106'7"
32.75	107'5"
33.00	108'3"
33.25	109'1"
33.50	109'11"
33.75	110'8"
34.00	111'6"
34.25	112'4"
34.50	113'2"
34.75	114'0"
35.00	114'10"
35.25	115'7"
35.50	116'5"
35.75	
	117′3″ 118′1″
36.00	
36.25	118′11″
36.50	119′9″
36.75	120′7″

Discus		
Metric Distance	English Equivalent	
	(approximate)	
37.00	121'4"	
37.25	122'2"	
37.50	123'0"	
37.75	123'10"	
38.00	124'8"	
38.25	126'6"	
38.50	126'3"	
38.75	127'1"	
39.00	127'11"	
39.25	128'9"	
39.50	129'7"	
39.75	130′5″	
40.00	131'2"	
40.25	132'0"	
40.50	132'10"	
40.75	133'8"	
41.00	134'6"	
41.25	135'4"	
41.50	136'2"	
41.75	136'11"	
42.00	137'9"	
42.25	138′7″	
42.50	139'5"	
42.75	140'3"	
43.00	141'1"	
43.25	141'10"	
43.50	142'8"	
43.75	143'6"	
44.00	144'4"	
44.25	145'2"	
44.50	146'0"	
44.75	146′10	
45.00	147'7"	
45.25	148′5″	
45.50	149′3″	
45.75	150'1"	
46.00	150'11"	
46.25	151′9″	
46.50	152′6″	
46.75	153'4"	
47.00	154′2″	
47.25	155'0"	
47.50 47.75	155′10″	
47.75	156′8″	
48.00	157′5″	
48.25	158'3"	
48.50	159'1"	
48.75	159'11"	
49.00 49.25	160′10″	
49.25	161'7"	
49.50 49.75	162'5"	
49.75	163'2"	

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Discus	
Metric Distance	English Equivalent
	(approximate)
50.00	164'0"
50.25	164'10"
50.50	165'8"
50.75	166'6"
51.00	167'4"
51.25	168'1"
51.50	168'11"
51.75	169'9"
52.00	170′7″
52.25	171'5"
52.50	172'3"
52.75	173'0"
53.00	173′10″
53.25	174'8"
53.50	175'6"
53.75	176'4"
54.00	176 4
54.00 54.25	
1	178'0"
54.50	178'9"
54.75	179'7"
55.00	180′5″
55.25	181'3"
55.50	182'1"
55.75	182'11"
56.00	183'8"
56.25	184'6"
56.50	185'4"
56.75	186'2"
57.00	187'0"
57.25	187'10"
57.50	187'7"
57.75	189'5"
58.00	190'3"
58.25	191'1"
58.50	191'11"
58.75	192'9"
59.00	193'7"
59.25	194'4"
59.50	195'2"
59.75	196'0"
60.00	196'10"
60.25	190 10
60.50	198'6"
60.75	199'3"
	200'1"
61.00	
61.25	200'11"
61.50	201′9″
61.75	202'7"
62.00	203'5"
62.25	204′2″
62.50	205′0″
63.75	209'2"

Wheelchair Shot Put	
Metric Distance	English Equivalent
1.00	(approximate)
1.00	3′3 ¼″
1.10	3′7 ¼″
1.20	3'11¼"
1.30	4'3 ¼"
1.40	4'7"
1.50	4'11"
1.60	5′3″
1.70	5'7"
1.80	5′10¾″
1.90	6'2 ¾"
2.00	6'6 ¾"
2.10	6′10 ¾″
2.20	7'2 ½"
2.30	7'6 ½"
2.40	7′10 ½″
2.50	8′2 ½″
2.60	8'6 ¼"
2.70	8'10 ¼"
2.80	9'2 ¼"
2.90	9'6 ¼"
3.00	9'10"
3.10	10'2"
3.20	10'6"
3.30	10'10"
3.40	11'1 ¾"
3.50	11′5 ¾″
3.60	11′9 ¾″
3.70	12'1 ½"
3.80	12′5 ½″
3.90	12′9 ½″
4.00	13′1 ½″
4.10	13′5 ¼″
4.20	13′9 ¼″
4.30	14'1 ¼"
4.40	14′5 ¼″
4.50	14'9"
4.60	15′1″
4.70	15'5"
4.80	15'9"
4.90	16'0 ¾"
5.00	16'4 ¾"
5.10	16′8 ¾″
5.20	17′0 ¾″
5.30	17′4 ½"
5.40	17'8 ½"
5.50	18'0 ½"
5.60	18'4 ½"
5.70	18'8 ¼"

## 21

Wheelchair Shot Put (Cont.)	
Metric Distance	English Equivalent (approximate)
6.00	19'8 ¼"
6.10	20'0"
6.20	20'4"
6.30	20'8"
6.40	21'0"
6.50	21'3 ¾"
6.60	21'7 ¾"
6.70	21'11 ¾"
6.80	22'3 ¾"
6.90	22′7 ½″
7.00	22'11 ½"
7.10	23'3 ½"
7.20	23'7 ½"
7.30	23′11 ¼″
7.40	24'3 ¼"
7.50	24'7 ¼"
7.60	24'11 ¼"
7.70	25′3″
7.80	25′7″
7.90	25'11"
8.00	26'3"
8.10	26'6 ¾"
8.20	26′10 ¾″
8.30	27′2 ¾″
8.40	27′6 ¾″
8.50	27′10 ½″
8.60	28′2 ½″
8.70	28'6 ½"
8.80	28′10 ½″
8.90	29′2 ¼″
9.00	29'6 ¼"
9.10	29'10 ¼"
9.20	30′2 ¼″
9.30	30'6"
9.40	30'10"
9.50	31′2″
9.60	31'6"
9.70	31′9 ¾″
9.80	32′1 ¾″
9.90	32′5 ¾″

Wheelchair Discus	
Metric Distance	English Equivalent
	(approximate)
3.00	9'10"
3.10	10'2"
3.20	10'6"
3.30	10'10"
3.40	11'1"
3.50	11′5″
3.60	11′9″
3.70	12'1"
3.80	12′5″
3.90	12'9"
4.00	13'1"
4.10	13′5″
4.20	13′9″
4.30	14'1"
4.40	14'5"
4.50	14'9"
4.60	15'1"
4.70	15′5″
4.80	15′9″
4.90	16'0"
5.00	16'4"
5.10	16'8"
5.20	17'0"
5.30	17'4"
5.40	17'8"
5.50	18'0"
5.60	18'4"
5.70	18'8"
6.00	19'8"
6.10	20'0"
6.20	20'4"
6.30	20'8"
6.40	21′0″
6.50	21'3"
6.60	21'7"
6.70	21'7
6.80	
6.90	22′3″
	22'7"
7.00	22'11"
7.10	23′3″
7.20	23′7″
7.30	23'11"
7.40	24′3″
7.50	24′7″
7.60	24'11"
7.70	25′3″
7.80	25′7″
7.90	25'11"

Wheelchair Discus (Cont.)	
Metric Distance	English Equivalent
	(approximate)
8.00	26'3"
8.10	26'6"
8.20	26′10″
8.30	27'2"
8.40	27'6"
8.50	27′10″
8.60	28'2"
8.70	28'6"
8.80	28'10"
8.90	29'2"
9.00	29'6"
9.10	29'10"
9.20	30'2"
9.30	30'6"
9.40	30'10"
9.50	31'2"
9.60	31'6"
9.70	31'9"
9.80	32'1"
9.90	32'5"
10.00	32'9"
10.10	33'1"
10.20	33'5"
10.30	33'9"
10.40	34'1"
10.50	34'5"
10.60	34'9"
10.70	35'1"
10.80	35'5"
10.90	35'9"
11.00	36'1"
11.10	36'5"
11.20	36'9"
11.30	37'0"
11.40	37'4"
11.50	37'8"
11.60	38'0"
11.70	38'4"
11.80	38'8"
11.90	39'0"
12.00	39'4"
12.10	39'8"
12.20	40'0"
12.30	40'4"
12.40	40'8"
12.50	41'0"
12.60	41'4"
12.70	41'8"
12.80	42'0"
12.90	42'3"
12.50	76.3

Wheelchair Discus (cont.)	
Metric Distance	English Equivalent
	(approximate)
13.00	42'7"
13.10	42′11″
13.20	43′3″
13.30	43'7"
13.40	43′11″
13.50	44'3"
13.60	44′7″
13.70	44′11″
13.80	45′3″
13.90	45′7″
14.00	45′11″
14.10	46′3″
14.20	46'7"
14.30	46′11″
14.40	47′3″
14.50	47'6"
14.60	47′10″
14.70	48'2"
14.80	48'6"
14.90	48'10"
15.00	49 <b>'</b> 2"
15.10	49'6"
15.20	49'10"
15.30	50'2"
15.40	50'6"
15.50	50′10″
15.60	51'2"
15.70	51′6″
15.80	51′10″
15.90	52'2"
16.00	52'6"
16.10	52'9"
16.20	53′1″
16.30	53′5″
16.40	53′9″
16.50	54'1"
16.60	54′5″
16.70	54′9″
16.80	55'1"
16.90	55′5″
17.00	55'9" 56'1"
17.10	
17.20	56'5"
17.30	56'9"
17.40	57'1"
17.50 17.60	57'5" 57'8"
17.70 17.80	58'0" 58'4"
17.80	58'4" 58'8"
17.90	20 g