



100m sprint: men

mathsblog.co.uk



Here are some of the most famous winners of the 100m and their times.

Year	City	Name	Country	Time
1896	Athens	Tom Burke	USA	12.00 sec
1936	Berlin	Jesse Owens	USA	10.3 sec
1980	Moscow	Allan Wells	GBR	10.25 sec
1992	Barcelona	Linford Christie	GBR	9.96 sec
2008	Beijing	Usain Bolt	Jamaica	9.69 sec

1. Which two athletes ran the 100m in less than 10 seconds?
2. How much faster was Linford Christie than Allan Wells?
3. How much slower was Tom Burke than Jesse Owens?
4. How much faster was Usain Bolt than Tom Burke?
5. Why do you think the record time keeps being broken?
.....
6. Will this always happen? Why?
7. What was Tom Burke's average speed (metres per second) during his race?
You can work this out by dividing 100 by 12.(to 2 decimal places)
8. Work out the average speed of each of the other athletes and complete the table on the next page.

100m sprint: men

mathsblog.co.uk

Work out the average distance per second each athlete ran and complete the table below.

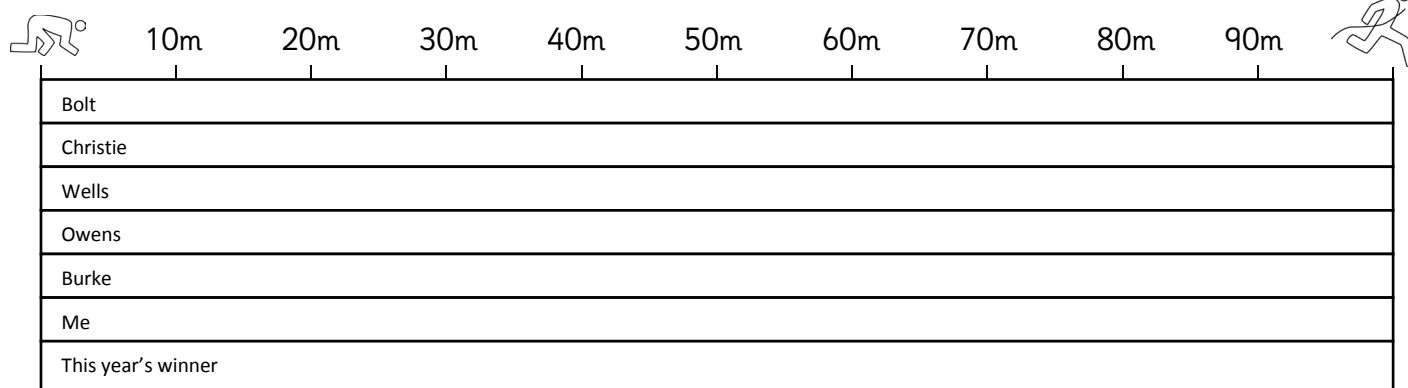
Athlete	Time	Speed (metres per second)
Tom Burke	12.0 sec	8.33 metres per second
Jesse Owens	10.3 sec	
Allan Wells	10.25 sec	
Linford Christie	9.96 sec	
Usain Bolt	9.69 sec	



Imagine they were all able to run in the same 100m race and run at the same speed as they did in the races shown. Mark on the track below where you think they would be when Usain Bolt crossed the line?

You can work this out by multiplying their distance run per second by Bolt's time of 9.69 seconds.

Also mark where you think you would be if you were in the race. Be realistic!



- Who do you think will win this year's 100m final?.....
 - Will they break the record time?
 - What do you think will be the winning time?
 - Can you think of any animals that could run 100m faster than Usain Bolt?
-

Answers

100m sprint: men

mathsblog.co.uk

Page 1

1. Linford Christie and Usain Bolt
2. 0.29 seconds
3. 1.7 seconds
4. 2.31 seconds
5. Any sensible answer eg fitter athletes, better training techniques, faster surface on track.
6. Any sensible answer.
7. 8.33 metres per second.

Page 2

Tom Burke 8.33 m/sec

Jesse Owens 9.71 m/sec (to 2 decimal places)

Allan Wells 9.76 m/sec

Linford Christie 10.04 m/sec

Usain Bolt 10.32 m/sec (that means he ran 10.32 metres in one second!!)

Approximate distances:

