

Speed distance & Time

Gravity design and build and fly jet suits – see the 1 minute whistle-stop tour of what we've been up to here; <https://www.youtube.com/watch?v=Vy1BqteDyal>

On 19 November 2019 Gravity Industries set a Guinness World Record, flying 85.04MPH whilst travelling to the end of Brighton Pier and back. You can find this video and watch the journey in 3D as if you are flying here... (great steering the view with an iPad)

<https://www.youtube.com/watch?v=kcfG86UmMkw>

In the clip, the jet suit is constantly moving at varying speeds, there is no 'consistent' speed for more than a second or two.

To describe speed more simply, we often use 'average speed'. This is where we choose a period of time and look at how far we have travelled in it; we find the average speed using the formula....

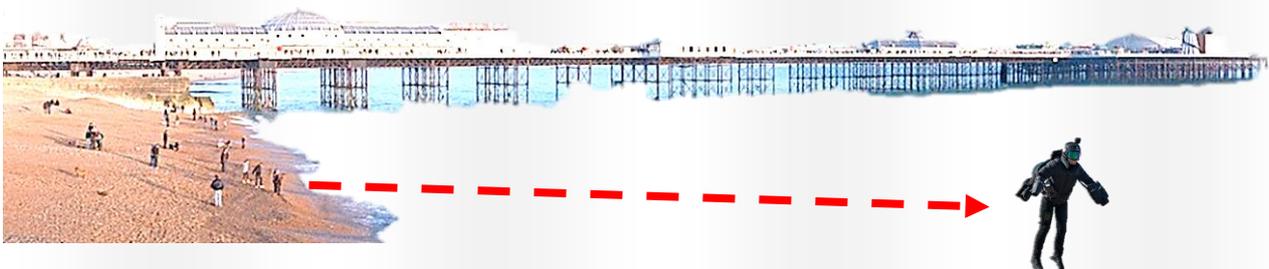
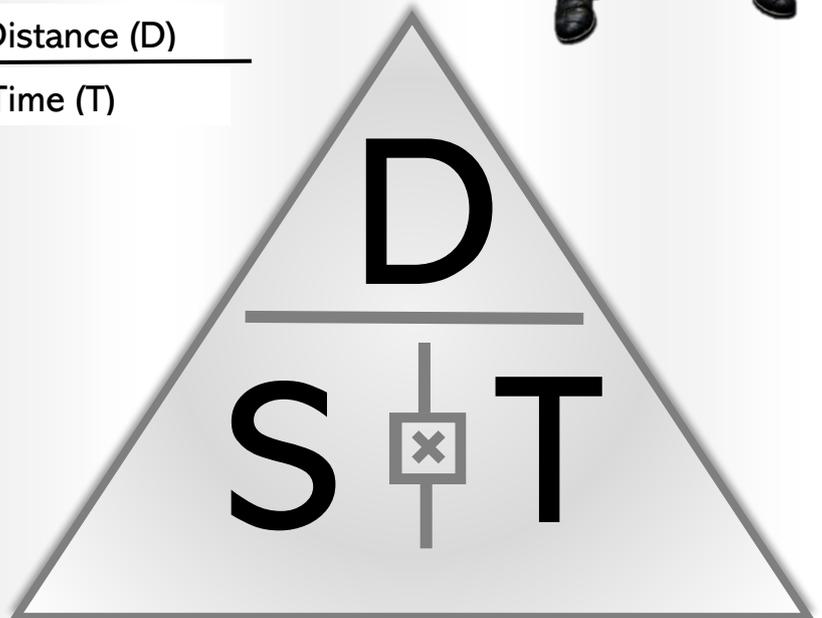


Average speed = distance ÷ time,

Written differently.....

$$(S) \text{ Average Speed} = \frac{\text{Distance (D)}}{\text{Time (T)}}$$

Using the triangle you can work out any of the three measures (speed distance & time) as long as you have two of the three. If you are looking for Distance, cover it up on the triangle and you get Speed (S) x Time (T). If you are looking for time, cover up the 'T' and you are left with Distance (D) divided by 'S' Speed. It is simple really.



If he travelled at a constant speed of 70 Km per Hour and covered a distance of 35 meters, how long was this part of the flight?

Note = your answer will be in hours, as the units for the speed must match the time units in the formula above.