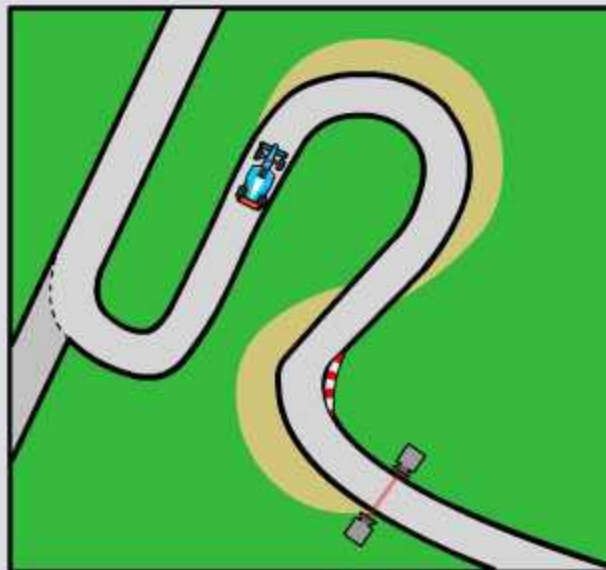
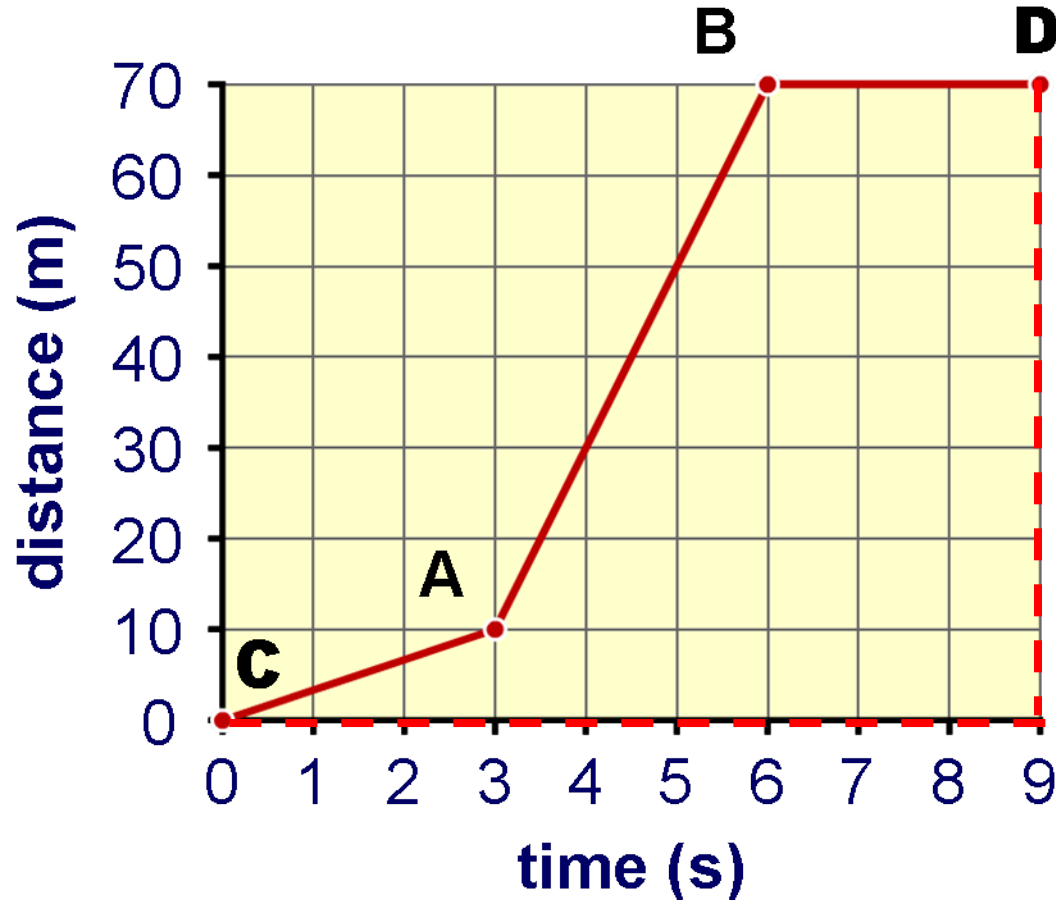


Average and Instantaneous Speed



What's the speed?

How can we find the average speed of this object between points **C** and **D**?

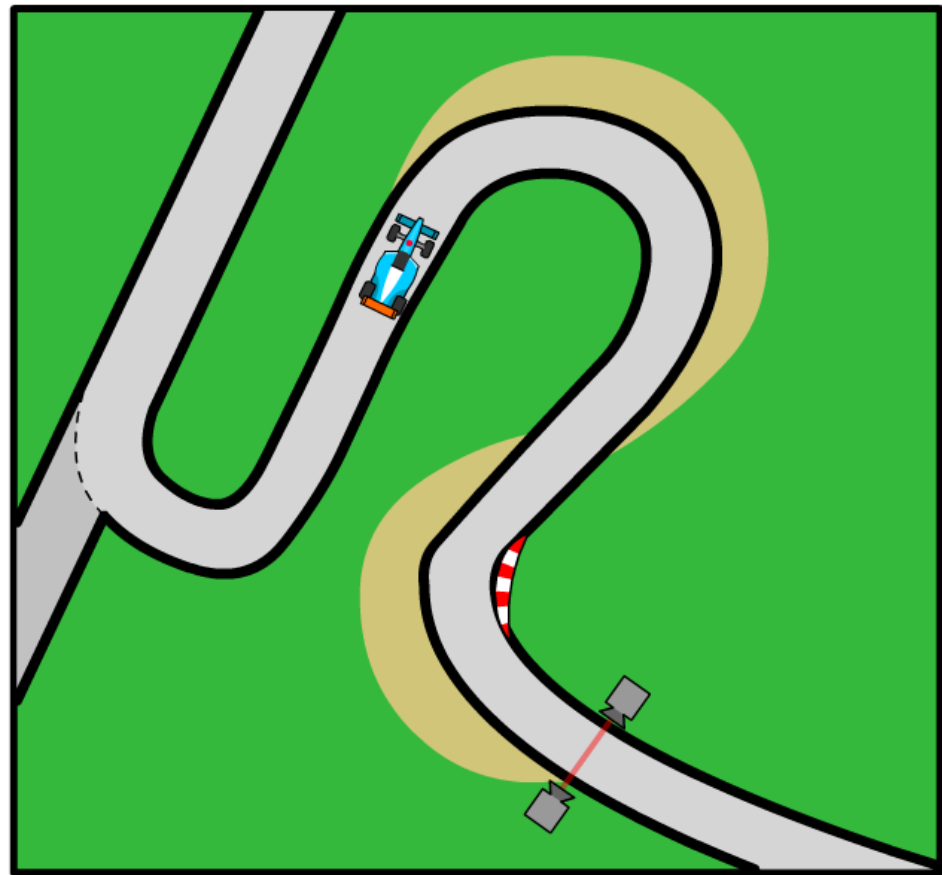


- the object has moved 70m ($70 - 0$)
- it took 9s to move this distance ($9 - 0$)
- speed = distance/time
 $= 70/9$
 $= 7.8 \text{ m/s}$

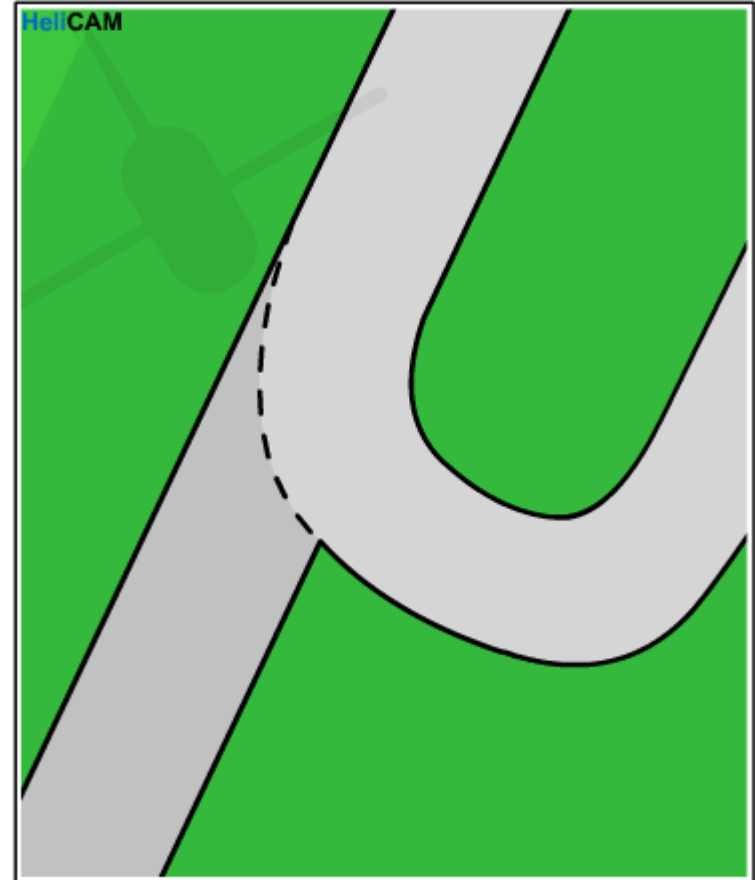
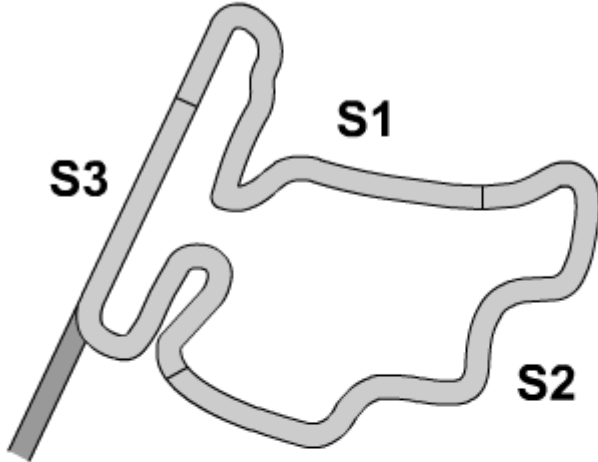
Average speed vs. instantaneous speed

The speed of a race car at any point around a track is called the **instantaneous speed**. A car will have a different instantaneous speed at each of the points around the track.

Average speed is the total distance traveled divided by the total time taken. It is never bigger than the instantaneous speed.



Calculating the speed of race cars



	distance	time	average speed
Sector 1	2.5km	00:00	? km/hr
Sector 2	3km	00:00	? km/hr
Sector 3	1.5km	00:00	? km/hr
Whole lap	7km	00:00	? km/hr

