

1. An object starts from rest and accelerates uniformly for 10 seconds up to a maximum speed of 20 ms^{-1} . It maintains this speed for an additional 5 seconds and then comes to rest in another 15 seconds.

(a) Sketch a velocity / time graph describing the motion (3 marks)



Sketch an accurate position / time graph describing the motion (4 marks)



(c) Determine the total average speed for the journey 2 marks