	Distance Time Graphs Mark Scheme	
1	Charlie leaves home at 09:00 and then stops ……6….. miles from home.	[1] Distance travelled
	He stops for 2 hours, then walks at an average speed of ……4.… mph, until 13:00.	[1] Speed calculated
	He stops for 1 hour, then walks backwards at 14:00.	[1] Direction mentioned
	15:00 to 17:00 he walked forwards 3 miles before walking back 3 miles but at twice the speed	[1] Correct comment about final part of the journey / correct calculation for speed
2(a)	Same distance travelled by both Katherine and Julia	[1]
2(b)	$6\ mph$	[1]
2(c)	$2\ hours\ 30\ minutes$	[1] Accept 2.5 hours
3(a)	$14 + 6 + 12 = 32km$	[1]
3(b)	Straight line back to her start point	[1]
	The line should meet the x-axis at 10:40	[1]
4	60mph for 10 mins 5 min rest 4 miles in 20 mins 6 miles in 10 mins 15 min rest	[1] mark for highest speed [1] for both rest times noted [1] for any other correct description
	Total distance covered = 40 miles	[1] for total distance covered
	Returns home over a 30 min period, speeding up for the last 10 mins	[1] mark awarded for correct interpretation of outward and return journey

5
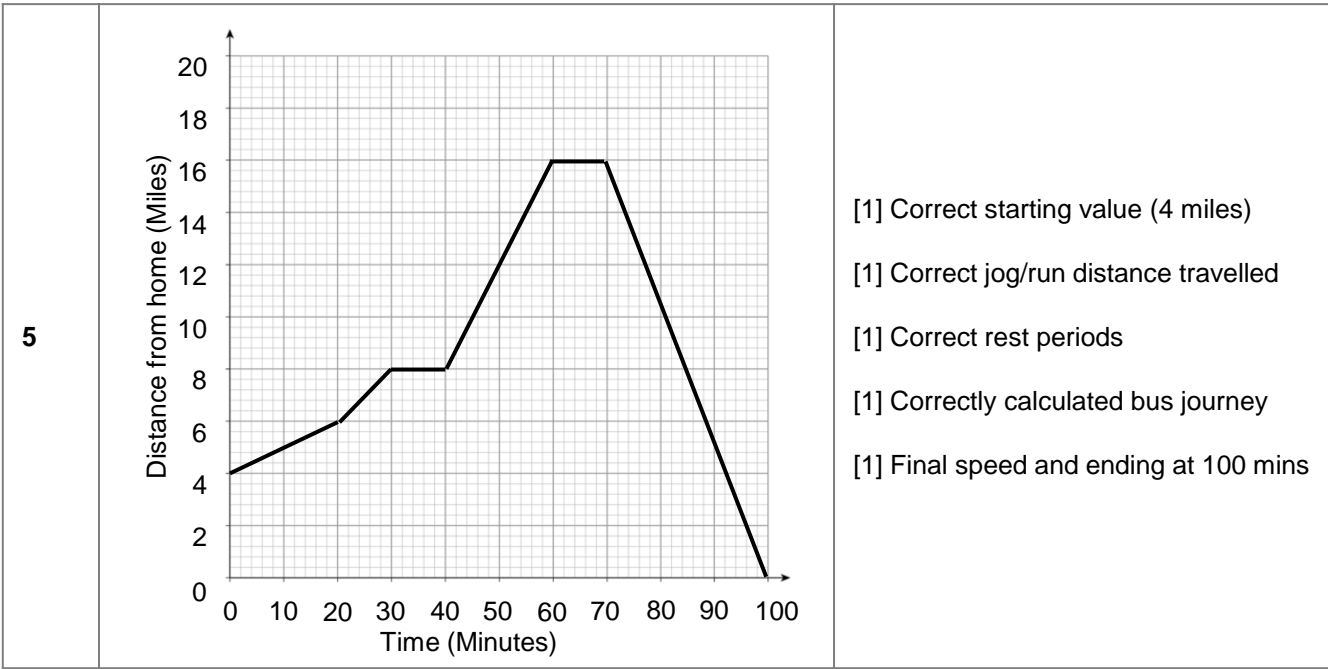
[1] Correct starting value (4 miles)

[1] Correct jog/run distance travelled

[1] Correct rest periods

[1] Correctly calculated bus journey

[1] Final speed and ending at 100 mins

6
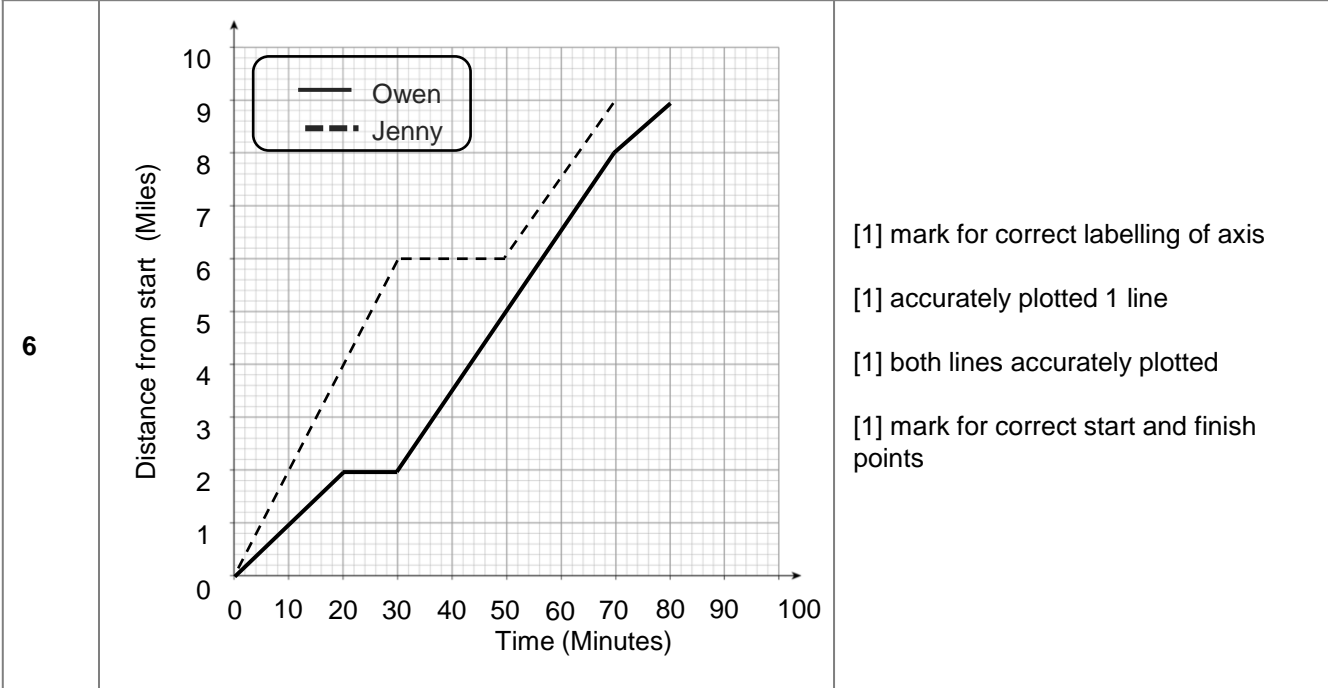
[1] mark for correct labelling of axis

[1] accurately plotted 1 line

[1] both lines accurately plotted

[1] mark for correct start and finish points

No as the two lines never cross | [1]

When Jenny completes the race Owen has approx. **1 mile** left to run | [1]

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	Rests	Does not rest
Travels in only one direction	A , D **[1]**	
Travels in multiple directions	E , F **[1]**	B , C , H , G **[1]**
Starts and ends at the same place	E **[1]**	C , G, H **[1]**

END