Question number	Answer	Notes	Marks
4 (a) (i)	use of acceleration = change in velocity / time; substitution; evaluation; e.g. acceleration = change in velocity / time acceleration = (-)30 / 6.2 (acceleration =) (-)4.8 (m/s^2)	seen anywhere in working allow clear indication that acceleration is gradient ignore minus sign allow (-)4.8 to (-)5.0 (m/s^2)	3
(ii)	clear indication that distance is area under line; understanding braking distance is area of triangle section only; evaluation; e.g. distance = area distance = 0.5 × 30 × 6.2 (distance =) 93 (m)	 54 (m) = 1 mark 147 (m) = 2 marks accept alternative method using ecf answer from (a)(i) and $v^2 = u^2 + 2as$ giving 93.75 (m)	3
(iii)	thinking distance: increase in thinking distance; (due to) increased reaction time; braking distance: no effect on braking distance; (due to) no effect on braking time / braking force;	 allow idea that braking distance does not depend on human factors	4
(b)	A; B is incorrect because it does not show deceleration C is incorrect because the distance cannot change abruptly and the car is moving throughout D is incorrect because the first portion shows that the car is not moving		1

Total for Question 4 = 11 marks