Question number	Answer	Accept	Reject	Marks
8 (a) (i)	(average) speed = distance / time;	Or equivalent – distance = speed x time, time = distance ÷ speed, or correct symbols e.g. v = d / t If (i) is blank, but correct equation written in (ii), then credit.		1
(ii)	Substitution 9000 / 900; Calculation 10; Unit m/s;	ACCEPT: e.g. 9/15 = 0.6 km/minute 9/0.25 = 36 km/hour 9000/15 = 600 m/min 9/900 = 0.01 km/s i.e. any unit that is consistent with the number		2 1
(iii)	Any **two** from: speed not constant ; OWTTE slow at (some) points / stations ; fast at (other) points / between stations ;	ACCEPT: this idea implied e.g slower (1) at stations (1)		2

8 (b) (i)	use of acceleration = change in velocity / time (taken) OR attempt at use of gradient ; Substitution 30 / 100 ; Calculation 0.3 (m/s^2) ;	Or equivalent – Change in vel = accn x time Time = change in vel ÷ accn Bald answer gets 3 marks		1 1 1
(ii)	Area under graph (clear evidence of attempt); (½ x 30 x 100) + (30 x 100) + (½ x 30 x 100); 6000 (m);	ACCEPT: trapezium method ½ x (300 + 100) x 30 ACCEPT: answers where the unit is consistent with the number. Bald answer gets all three marks		3

Total 12 marks