Question Number	Scheme			Marks
8(a)	$s = \frac{1}{2} \times 3 \times 4^2$	**OR**	$s = \frac{1}{2} \times 4 \times 12$	M1
	$= 24$ (m)			A1
				(2)
(b)	12 (m s^{-1}); 42 (m s^{-1})			B1
	$12 \times 20 + \frac{1}{2} \times 1.5 \times 20^2$ (= 540)	**OR**	$\left(\frac{12+42}{2}\right) \times 20$	M1 A1ft
	$42 \times 2 + \frac{1}{2}(-4) \times 2^2$ (= 76)	**OR**	$\left(\frac{42+34}{2}\right) \times 2$	M1 A1**ft**
	Total = 640 (m)			A1 cao
				(6)
				(8)
	Notes for Question 8			
8(a)	M1 Complete method to find distance travelled in first 4 s Must be area of a triangle from a *v-t* graph			
	A1 Correct answer			
8(b)	B1 Both speeds seen anywhere e.g. on a diagram or in part (a)			
	M1 Complete method to find total distance travelled in next 20 s Must be area of a trapezium from a *v-t* graph (they may use a rectangle + triangle)			
	A1 **ft** Correct unsimplified distance, **ft** on their 12			
	M1 Complete method to find total distance travelled in next 2 s Must be area of a trapezium from a *v-t* graph (they may use a rectangle + triangle)			
	A1 **ft** Correct unsimplified distance, **ft** on their 42			
	A1 cao for total distance			

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