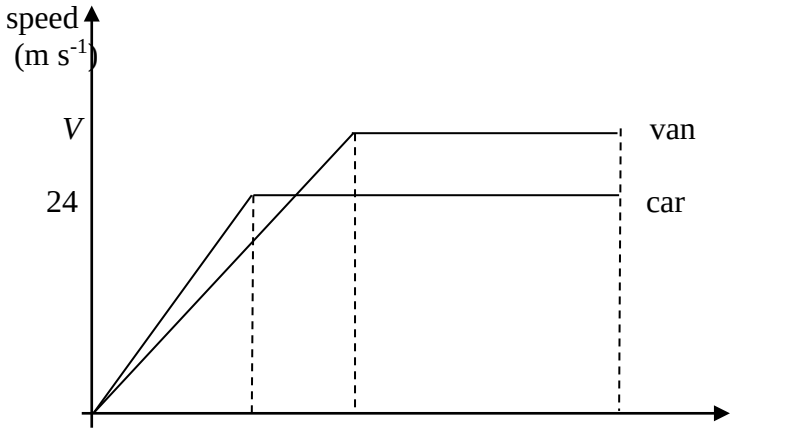
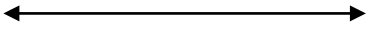
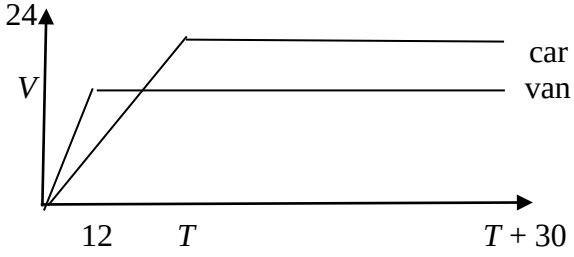
Question Number	Scheme	Marks
5(a)	 **OR** 	B1 shape of either B1 shape of second (must cross first and end at the same t value) B1 V,24,12, T, T+30 oe with delineator B0 if vertical solid lines (3)
	N.B. 	**This graph can score all 3 marks.**
(b)	$\frac{1}{2}(T+30+30)\times 24=816$ **OR** $\frac{1}{2}\times T\times 24+30\times 24=816$ $T=8$ (s)	M1A1 A1 (3)
(c)	$\frac{1}{2}\big((T+30)+(T+18)\big)V=816$ **OR** $\frac{1}{2}\times 12V+V(18+T)=816$ $V=25.5$	M1A1 **ft** A1 (3) **[9]**
ALT	(b) Dist travelled while accelerating $=816-720=96$ m $s=\frac{u+v}{2}t \Rightarrow \left(\frac{0+24}{2}\right)T=96$ M1A1 $T=8$ (s) A1	