Question	Answer	Mark	Mark scheme	Additional guidance
16 (a)	125 to 150	M1	for drawing a tangent at $t = 1.5$	The tangent must be seen to award any marks
		M1	for a complete method to find the gradient from tangent eg $\frac{450}{3.4}$ or $\frac{\text{change in } y}{\text{change in } x}$	This mark can be awarded if the tangent is drawn at $t \neq 1.5$ Working may be seen on the diagram
		A1	for answer in the range 125 to 150	Accept answers in the form $\frac{a}{b}$ where a and b are integers Award 0 marks for a correct answer (in the range) with no (or incorrect) supportive working
(b)	910	M1	for a method to find an appropriate area, eg $0.5\times 70\ (=35)$ **or** $0.5\times 1\times(70+250)\ (=160)$ **or** $0.5\times 0.1\times(250+370)\ (=310)$ **or** $0.5\times 1\times(370+440)\ (=405)$ **or** for a method to find an estimate for the area of at least one rectangle with height at the intersection of midpoint and curve, eg $35\times 1\ (=35)$ **or** $120\times 1\ (=120)$ **or** $390\times 1\ (=390)$ **or** $340\times 1\ (=340)$	Must have one correct expression or evaluation for the award of this mark May be seen as a rectangle added to a triangle
		M1	for a complete method, eg $0.5\times 70+0.5\times 1\times(70+250)+0.5\times 1\times(250+370)+0.5\times 1\times(370+440)$ **or** $\frac{1}{2}\times 1\times(6+440+2(70+250+370))$ **or** $35\times 1+120\times 1+390\times 1+340\times 1$	Allow 1 error in velocity values used
		A1	for 910 **or** 885	Allow 885 only if it comes from rectangle/midpoint method