Question number	Scheme	Marks
2	$(V=)3x^3$	B1
	$\frac{dV}{dx}=9x^2$	M1
	$\left(\frac{dx}{dt}=\right)\frac{dV}{dt}\times\frac{dx}{dV}$ or $\frac{dV}{dt}=\frac{dV}{dx}\times\frac{dx}{dt}$ oe	M1
	$\left(\frac{dx}{dt}=\right)\frac{8}{9x^2}$ oe	A1
	$\left(\frac{dx}{dt}=\right)\frac{8}{9\times2^2}$ oe	dM1
	$\frac{2}{9}$ oe	A1 [6]
		Total 6 marks

Part	Mark	Additional Guidance
	B1	Correct simplified expression for Volume
	M1	Minimally acceptable attempt at differentiation– see general guidance (kx^2 where $k\neq0$ if working from correct V)
	M1	A correct chain rule that could be used to find $\frac{dx}{dt}$ Condone absence of $\frac{dx}{dt}$ unless $\frac{dx}{dt}$ is not the subject.
	A1	As shown oe
	dM1	Substitution of $x = 2$ into their $\frac{dx}{dt}$, dependent on second method mark.
	A1	Correct answer (exact or correct to 2dp or better)
	For all marks condone poor notation e.g. use of dy/dx as long as not ambiguous.	