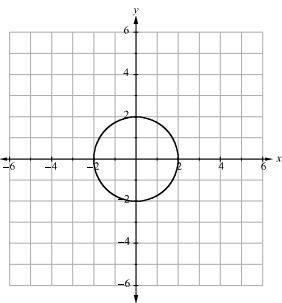
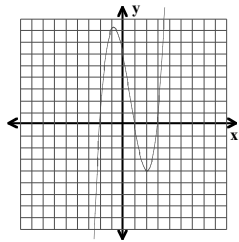
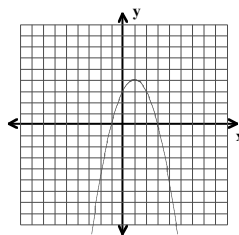
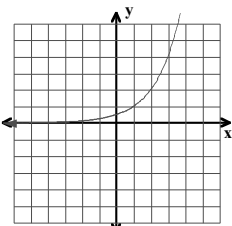
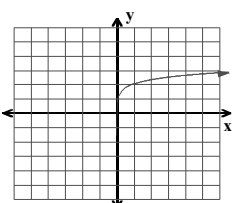
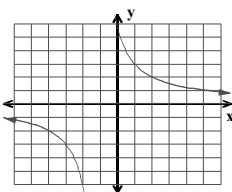


Assessment Schedule – 2006**Mathematics: Draw straightforward non-linear graphs (90285)****Evidence Statement**

	Assessment Criteria	No.	Evidence	Code	Judgement	Sufficiency
ACHIEVEMENT	Draw straight-forward non-linear graphs.	1(a)	Circle centre (0,0) radius 2 	A	Correct shape and smoothly drawn through $(0, 2)$, $(-2, 0)$ $(0, -2)$, $(2, 0)$	ACHIEVEMENT: 2 of A Replacement Evidence: Any of Qs.1d, 1e, 3a can replace evidence for any one of Qs.1a, 1b or 1c.
		1(b)		A	Correct shape and smoothly drawn through $(0, 6)$, $(-2, 0)$ $(1, 0)$, $(3, 0)$	
		1(c)		A	Correct shape and smoothly drawn through vertex $(1, 4)$ and points $(-1, 0)$, $(3, 0)$ $(0, 3)$	

	Assessment Criteria	No.	Evidence	Code	Judgement	Sufficiency
ACHIEVEMENT WITH MERIT	Draw non-linear graphs	1(d)		A M1	Correct shape and smoothly drawn through $(0, 0.5)$, $(1, 1)$ and two other correct points. Approaches the x-axis asymptotically.	ACHIEVEMENT WITH MERIT: Achievement plus 4 of M including at least one M1 AND at least one M2
		1(e)		A M1	Correct shape and smoothly drawn through $(1, 2)$ Approaches the y-axis asymptotically.	
	AND	2(a)	$(x + 1)^2 + (y - 2)^2 = 9$	M2	Or equivalent.	Replacement Evidence: Q.4 for any of Qs.2a, 2b or 3b
	Use non-linear graphs to solve problems.	2(b)	$y = (x + 2)^2 - 4$	M2	Or equivalent.	
		3(a)		A M1	Correct shape and smoothly drawn through at least two correct points in each quadrant, including $(0, 6)$ The arms of the curve approach $t = -1$ asymptotically	
		3(b)	Time = 3.8 years	M2	Allow $3.5 \leq t \leq 4.1$ or consistent with the graph.	

	Assessment Criteria	No.	Evidence	Code	Judgement	Sufficiency
ACHIEVEMENT WITH EXCELLENCE	Determine and apply an appropriate model for a situation involving graphs.	4	Establish the parabola. $y = 500(x - 8)^2$	M2	Alternative methods acceptable.	ACHIEVEMENT WITH EXCELLENCE: Merit plus E
			When $x = 6.5$ then $y = 1125$ litres .	E	Accept a minor error in working.	

Judgement Statement

Mathematics: Draw straightforward non-linear graphs (90285)

Achievement	Achievement with Merit	Achievement with Excellence
Draw straightforward non-linear graphs $2 \times A$	Draw non-linear graphs. <i>Use non-linear graphs to solve problems.</i> Achievement <i>plus</i> $4 \times M$ including at least $1 \times M1$ and $1 \times M2$ OR $3 \times M1$ and $2 \times M2$	Determine and apply an appropriate model for a situation involving graphs. Merit <i>plus</i> $1 \times E$