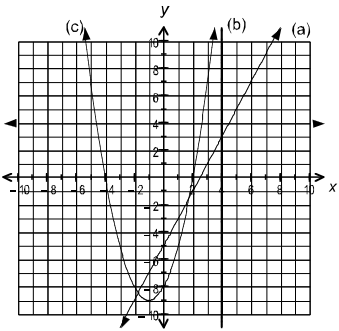
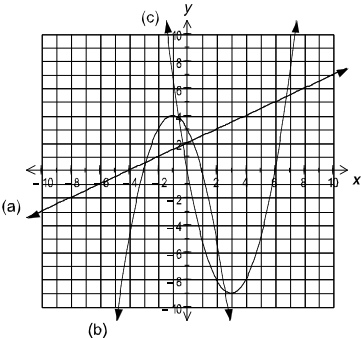


Assessment Schedule – 2006**Mathematics: Sketch and interpret graphs (90148)****Evidence Statement**

	Criteria	No.	Evidence	Code	Judgement	Sufficiency
Achievement	Sketch, and interpret features of, graphs.	1(a)		AG	Line (a) is straight, gradient is 2, y-intercept is -5.	2 × code AG plus 2 × code AI
		1(b)		AG	Line (b) is a vertical line through $x = 4$.	
		1(c)		AG	The parabola is a symmetrical smooth curve. Intercepts and tp within ± 0.5 $x = (-4, 0)$ and $x = (2, 0)$ $y = (0, -8)$ minimum $(-1, -9)$	
		2(a)	0.5 metre	AI	Or equivalent.	Replacement: MG for AG and MI or E for AI
		2(b)	1.5 metres	AI	Or equivalent.	
		2(c)	5 metres	AI	Or equivalent.	
Achievement with Merit	Write equations for linear graphs.	3(a)	$y = 7$	MQ	Equivalent forms of the equations are acceptable. Must be equations.	Achievement plus 2 × code MG plus 2 × code MI plus 2 × code MQ
		3(b)	$y = -x - 5$	MQ		
		3(c)	$y = \frac{x}{2} + 4$	MQ		
	Sketch, and interpret features of, graphs.	4(a)		MG/AG	Line (a) is straight, intercepts $x = (-4, 0)$ $y = (0, 2)$	OR 3 × code MG plus 3 × code MI plus 3 × code MQ
		4(b)		MG/AG	Parabolas (b) and (c) are symmetrical smooth curves. Intercepts and tp within ± 0.2 (b) $x = (1, 0)$ and $x = (-3, 0)$ $y = (0, 3)$ maximum $(-1, 4)$	
		4(c)		MG/AG	(c) $x = (0, 0)$ and $x = (6, 0)$ $y = (0, 0)$ minimum $(3, -9)$	
		5(a)	4 metres	MI/AI	No alternative.	
		5(b)	$\frac{4-6}{40} = -\frac{1}{20}$ or -0.05	MI/AI	Or equivalent, and consistent with Q5(a).	
		5(c)	1 metre	MI/AI	No alternative.	
	Determine and apply an appropriate model for a situation involving graphs.	5(d)	The parabola is of the form: $y = k(x - 60)^2 + 8$ Since D (50,4) is on this parabola Solve $4 = k(50 - 60)^2 + 8$ To get $k = -0.04$ Model is: $y = -0.04(x - 60)^2 + 8$ To find the height of F, solve $y = -0.04(72 - 60)^2 + 8$ $= 2.24$ Height is 2.24 metres.	MI/AI MQ	Must have this or equivalent model and consistent with Q5(a).	Achievement with Merit plus code E
				E/MI/AI	Evidence of correct model being used to get correct height.	

Judgement Statement**Mathematics: Sketch and interpret graphs (90148)**

<i>Achievement</i>	<i>Achievement with Merit</i>	<i>Achievement with Excellence</i>
Sketch and interpret features of graphs. $2 \times \text{AG}$ <i>plus</i> $2 \times \text{AI}$	Sketch and interpret features of graphs. Write equations for linear graphs. Achievement <i>plus</i> $2 \times \text{MQ}$ <i>plus</i> $2 \times \text{MG}$ <i>plus</i> $2 \times \text{MI}$ OR $3 \times \text{MQ}$ <i>plus</i> $3 \times \text{MG}$ <i>plus</i> $3 \times \text{MI}$	Determine and apply an appropriate model for a situation involving graphs. Merit <i>plus</i> $1 \times \text{E}$